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ABSTRACT

Focusing on national enrollment trends and projections from 1960 through 2010, this study examined two scenarios: that age-specific postsecondary participation rates will be the same in the future as they were in 1980, and secondly, that because of enrollment "catch-up" and "saturation" factors that there will be minor age-specific enrollment changes between 1980 and 2000, with rates stabilizing after that. Chapter 1 presents an overview of the study focusing on aspects as population change, education participation patterns, and projected future participation in postsecondary education from 1990 through 2010. Chapter 2 presents background information on the study including a description of the data sources and sampling procedures. Chapter 3 tracks patterns in population growth and age shifts from 1920 to 2040 and discusses racial and ethnic change. Chapter 4 addresses the historic participation trends of baby boom and other cohorts, analyzing United States enrollment and educational trend data from 1960 through 1980. The final chapter projects participation in postsecondary education of baby boom and other cohorts from 1990 through 2010. It is concluded that as baby boom cohorts reach retirement age, the dependency burden on younger adults will rise substantially and baby boomers themselves can be expected to have many concerns other than education. Six appendices include census variable definitions, interpretative notes, and supporting data. (LPT)

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AS THE BABY BOOM AGES:

ADULT PARTICIPATION IN POSTSECONDARY EDUCATION, 1960 - 2010

by:
Sheila A. Knop

for:
The Western Interstate Commission on Higher Education
and
The College Board

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October, 1989

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ABOUT THE AUTHOR

Sheila Knop is trained in adult education, community and population change, and has devoted the past several years to adult learning services planning and policy research. Author of several articles and monographs on related topics, she directed the Colorado Commission on Higher Education (CCHE) Lifelong Learning Policy Studies and Population Dynamics Projects, served as editor-publisher of Population Analyses for Colorado Educators, and is presently a consultant to CCHE, WICHE and other groups. She received her B.S. from North Dakota State University (1968), M.Ed. from Colorado State University (1973), and Ph.D. from Texas A & M University (1977).

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TABLE OF CONTENTS

Page

INTRODUCTION AND HIGHLIGHTS
- Introduction 1
- Highlights 3
  - Population change 3
  - Education participation patterns, 1960 - 1980 4
  - Future participation in postsecondary education, 1990 - 2010 5

BACKGROUND
- Data Sources and Sampling Procedures 7
- Variable Definitions and Interpretative Notes 8
  - Baby boom and other age cohorts 8
  - Other time-series variables 9
  - Additional characteristics reported for 1980 10

TRACKING THE BABY BOOM
- Population Growth and Age Shifts 11
  - Pre-baby boom to early-baby boom change (1920 - 1950) 11
  - Early-baby boom to post-baby boom change (1950 - 1980) 12
  - Future age change (1980 - 2040) 12
- Racial and Ethnic Change, 1980 - 2040 13

HISTORIC EDUCATION PARTICIPATION TRENDS OF BABY BOOM AND OTHER COHORTS
- Overview 15
- U.S. Enrollment and Educational Attainment Trend Data, 1960 - 1980 16
  - Time-series comparisons, U.S. population 16
  - Schooling and enrollment by gender 19
  - Schooling and enrollment by minority status 20
- U.S. Educational Participation Profiles, 1980:
- Enrollment Rates by Selected Population Characteristics 22
  - Overview 22
  - Metropolitan/non-metropolitan residence 22
  - Employment status 23
  - Poverty status 23
  - Interstate migration status 24
  - Summary patterns 24
- Distinctions Among U.S. Regions, 1980 25

FUTURE PARTICIPATION IN POSTSECONDARY EDUCATION
OF BABY BOOM AND OTHER COHORTS, 1990 - 2010
- Overview 27
- Estimates of the Population Pool Eligible for Postsecondary Education 28
- Future Enrollments: Alternate Scenarios for 1990, 2000 and 2010 29
  - Trends 29
  - Scenario one 31
  - Scenario two 32
  - Comparison with institutional reports and NCES projections 33
- Composition of the Student Population 34
- Concluding Comments 36

ENDNOTES 38

TABLES, FIGURES and APPENDICES

Tables

1A. Tracking the Baby Boom: Historic and Projected Age Distribution of the U.S. Population, 1920 - 2040, in Percents.

1B. Tracking the Baby Boom: Changes in the U.S. Age Distribution and Size of Age Categories for 30 Year Intervals, 1920-2040, in Percents and Numbers.

2A. Distribution of the U.S. Population by Age and School Enrollment Status in Percents, Numbers and Change, 1960 - 1980.

2B. Age-Specific Enrollment Rates, by Educational Attainments of the U.S. Population, 1960 - 1980.

3A. Educational Attainment of the U.S. Population Age 25 and Older, 1960 - 1980.

3B. Age-Specific Enrollment Rates for Males and Females by Educational Attainment, 1960 - 1980.

4. Age-Specific Enrollment Rates by Minority Status and Educational Attainment, U.S. Population, 1960 - 1980.

5A. Scenario One, Projected Postsecondary Education Enrollment Numbers and Rates for Degree-Seeking Students, Spring 1990, 2000 & 2010: For Baby Boom and Other Age-Cohorts of U.S. High School Graduates.

5B. Scenario Two, Projected Postsecondary Education Enrollment Numbers and Rates for Degree-Seeking Students, Spring 1990, 2000 & 2010: For Baby Boom and Other Age-Cohorts of U.S. High School Graduates.

6A-B. Tracking the Baby Boom: Historic and Projected Percent Distribution of Postsecondary Enrollment by Age, 1960 - 2010.

Figures

1. U.S. Births, 1930 - 1980, in Millions.

2. Historic and Projected Change in U.S. Population Size and Median Age, 1920-2040.

3A-B. Projected Composition of the U.S. Population by Race (3A) and Spanish-Origin (3B), 1980-2040.

4. Changes in U.S. Population Size and School Enrollments, 1960-1980.

5. As the Baby Boom Ages: U.S. School Enrollment Rates, 1960-1980

6. U.S. Population Age 25 Years and Older, 1980: Median Years of School Completed by Race and Spanish-Origin.

7A-B. Age-Specific U.S. Postsecondary Trends, 1960 - 2010.

8. Demographic and Socio-Economic Change Factors Which Help to Explain U.S. Postsecondary Enrollment Trends, 1960 - 2010.

Appendices

A. Census Variable Definitions and Interpretative Notes.

B. Table B1, A-C. Age-Specific Enrollment Rates and Percent Change, 1960 - 1980, for the U.S. Population, High School Graduates and Persons with Fewer than 12 Years of Schooling.

C. Table C1. Educational Attainment of the U.S. Population Age 25 and Older, 1980: By Race and By Spanish-Origin, in Percents.
Table C2. Age-Specific Postsecondary Enrollment Rates of the U.S. Population, Spring, 1980, By Race and Spanish-Origin.

D. Table D1, A-H. Summary: Age-Specific Enrollment Rates of Baby Boom Cohorts and Others, by Selected Characteristics, U.S. Population, 1980.

E. Figure E. Regions and Census Divisions of the U.S., 1980.
Table E1, A-B. Selected Characteristics of 1980 U.S. Regional Populations: Educational Attainment and School Enrollments.
Table E2, A-B. Selected Characteristics of 1980 U.S. Regional Populations: Age, Race and Spanish-Origin.

F. Table F1. Tracking the Baby Boom in the Short-Range Future: Projected Changes in the U.S. Age Distribution and Size of Age Categories, 1980 - 2010, in Percents and Numbers.
Table F2. Age-Specific Estimates of the Population Pool Eligible for Postsecondary Education Based on Projections of High School Graduates, 1990, 2000 and 2010.

INTRODUCTION AND HIGHLIGHTS

Introduction

While U.S. education rode the wave created by the baby boom and economic prosperity, much attention was focused on educational needs of youth and there was little public hesitation to invest in educational services. But the wave has crested. There are relatively fewer young people and the economy has slowed. With the aging of the baby boomers, middle-aged adults are rapidly becoming America's largest group of citizens. Such dramatic age shifts present major challenges to postsecondary education planners. Important questions are being raised about what demands postsecondary institutions might expect in the future, and the extent to which baby boomers and other adults might participate in and support educational activity.

In recognition of these concerns, the Western Interstate Commission on Higher Education and the College Board have sponsored this study. The study documents past participation patterns and trends for several adult age-cohorts, and provides two enrollment scenarios for the future.

The investigation takes us on a journey through past and future, with most attention given to the years 1960 through 2010. This fifty-year period is especially relevant to planners because it captures age, life-cycle and education-related transitions of the large baby boom population and attendant influences on education and society.

The focus of the study is on two groups of baby boomers (those born earlier and those born later in the period), and for comparison, the birth cohorts which immediately preceded and followed them. Representing an exceptionally large portion of the nation's population, these are the cohorts that will progress from younger adulthood through middle-age over the next two decades, with the oldest of retirement age by 2010. Beyond age, the study

considers other factors that aid in understanding participation rates and patterns, specifically, race-ethnicity, gender, place of residence, and employment, income and migration status.

The study is based on data from the 1960, 1970 and 1980 censuses and population projections available from the Census Bureau. Conjectures about future participation are grounded in age-specific population projections and analyses of historic high school graduation and postsecondary-level enrollment rates and participation patterns. The analysis considers past enrollment-inflating effects (such as the Vietnam-era draft and G.I. Bill, the Civil Rights Movement, affirmative action legislation and availability of student aid programs) along with forces that have potential to cause enrollment trends to change in the future.

The report includes two alternate sets of age-specific postsecondary enrollment projections for degree-oriented students, nation-wide, in the Spring of the years 1990, 2000 and 2010. The first projections set is based on the assumption that postsecondary participation rates of degree-seeking adults will be the same in the future as those observed in 1980. The second set is based on a scenario which assumes that future participation rates will be somewhat different than the past, with age-specific enrollment rates adjusted to accomodate the trend of "recurrent" education (e.g., pursuit of a second degree/certificate), "catch-up" factors (e.g., women and minorities entering college at older ages) and "saturation" effects (i.e., effects of high levels of educational attainment among many of the population, and labor force competition). The age-specific pool of high school graduates that will be eligible to participate in degree-oriented postsecondary education programs is identified first. Then alternate postsecondary enrollment rates are established, with future enrollments estimated for baby boom and other

cohorts, and expected shifts in the composition of the student population described.

The projections are not offered as predictions, but as tools for planning. In this spirit, enough data are included here so that planners can address the question "what would future enrollment patterns and numbers be like if different assumptions were made about the future?". Notes are also provided on factors that could affect the accuracy of projections, and brief comments are offered about forces likely to influence enrollments at state and institutional levels.

The report focuses on national enrollment trends and projections. As such, it offers macro-level information especially relevant to national planners and policy-makers. But what is observed at the national level is not necessarily what we might find at other levels of geography, and, should similar circumstances and trends appear across levels, the same explanations may not account for them. To avoid over-generalizing national data, the report includes brief sets of 1980 data for the four Census regions of the country. And, to enable comparable state and sub-state investigations, the study relies on data which are also available for smaller areas, provides details on data sources and analytic procedures, and includes references to other relevant reports.

Highlights

Population change. Unprecedented in U.S. history, the baby boom was unexpected because it sprang from a small cohort of women of child-bearing age, followed trends of low fertility and shrinking family size, and extended from World War II through the mid-1960s. Parents, pediatricians, school and college personnel and business people well-remember the effects of having so

many young people in the population. By virtue of sheer size alone, the cohort will continue to have significant influence on society as it ages. Following the baby boom the rate of population growth slowed, and median age is rising steadily, with one-half the U.S. population projected to be over 40 before 2020. By the year 2000 baby boom cohorts will be in their 30s, 40s and 50s, and account for 42% of the U.S. population.

The vast majority of baby boom births were White and non-Hispanic. But over the years there has been steady growth in the size of other racial groups and the Hispanic population, and with so many minority women now of child-bearing age, greater minority population growth is anticipated in the future. Black and Hispanic median ages, especially, will be several years younger than that of White, non-Hispanics for the foreseeable future.

Education participation patterns, 1960-1980. With the aging of the baby boom population and the many changes of the 1960s and '70s, there has been great change in education participation rates and patterns -- especially at the postsecondary level. The effects of such large numbers of young people coupled with parent's aspirations for their children, labor force needs for highly skilled workers, military draft exclusions for students, and demands for equal economic opportunity and social justice caused postsecondary institutions to open their doors widely, with rapid growth in student numbers and considerable change in the composition of the student population.

Changes were especially great in the decade of the '60s as early baby boomers (and those born just before the boom) took advantage of the many educational opportunities available to them. Considerably less enrollment growth occurred in the decade of the '70s as younger baby boomers faced increasingly stiff competition from older cohorts, and as enrollment-inflating effects of the Vietnam war, economic affluence, student aid, and an open job

market diminished. With this slower growth, changes in the composition of the student population accelerated. The continued emphasis on opportunities for racial-ethnic minorities, rapid increases in numbers of women entering the labor force, and technology-induced change which made "recurrent" education a necessity all had their influence; as a result, proportions of older students, women and minorities increased markedly.

Schooling levels of the population climbed concommittantly and trend data suggest that enrollment "saturation" factors are at work, with many citizens having so much degree-oriented schooling as to make the need for more less compelling. Still, differences in schooling levels by gender, minority status, geographic location and personal circumstance remain, and data show that sub-groups of the population are striving to "catch-up".

Future participation in postsecondary education, 1990-2010. A procedure for hypothesizing future enrollment patterns and projecting enrollment size is described, and two enrollment scenarios are illustrated. Based on analysis of historic high school completion and adult postsecondary participation patterns together with age-specific population projections of the Census Bureau, the scenarios capture enrollment influences of baby boom cohorts as they progress through middle-age and approach retirement from 1980 through 2010.

The first enrollment scenario is based on the assumption that age-specific postsecondary participation rates will be the same in the future as they were in 1980. Under this scenario postsecondary enrollments are projected to be about one million higher in the Spring of 1990 than they were in Spring of 1980, with enrollments mostly level after 1990. The second scenario assumes that, because of enrollment "catch-up" and "saturation" factors, there will be minor age-specific enrollment rate changes between 1980 and 2000, with rates stabilizing after that. Under this scenario enrollments

are about 1.5 million higher in 1990 than in 1980, drop back some in the year 2000, and reach an all-time high in the year 2010.

Both scenarios show greater change in the composition of the student population than in their numbers, with proportions of older students increasing markedly (most noticeably in Scenario 2) and proportions of female and racial-ethnic minority students on the rise. Increased representation of low-income and working students is also expected, and places with many in-migrants should anticipate their being over-represented among the student population.

Athough national postsecondary enrollment levels are expected to soon stabilize, this may not be the case for all states and institutions. "Catch-up" and "saturation" themes suggest that states and localities with 1) a high proportion of people with relatively low schooling levels, 2) growing labor-force demands for college graduates, and 3) adequate educational resources to meet the demand are the ones most likely to see greatest increases in postsecondary enrollments. Beyond this, factors such as labor-force circumstances, the accessibility of educational offerings, perceived value of postsecondary credentials, and the ability and willingness of the public to support education will help determine future postsecondary education enrollment trends.

BACKGROUND

Data Sources and Sampling Procedures

The study is based on data from the U.S. Bureau of the Census' 1960, 1970 and 1980 decennial censuses of population and housing. The census is conducted in April and provides a wealth of data which are available for analysis at many levels of geography. Some data are gathered from all people on the familiar short-form questionnaire (e.g., age, race, residence); other data are gathered from a massive sample on the long-form questionnaire (20% of U.S. households, 1980). The long form contains short-form items and many more, among them, educational attainment and school enrollment.

Because Census publications do not report education characteristics for the several adult age-cohorts considered in this study, Public Use Microdata Samples (PUMs) computer files were used.[1] Personal records with variables relevant to the study were extracted from these large tapes. The resulting one-percent sample extract tapes contain records on over 2.2 million persons for 1980, more than 2.0 million for 1970, and nearly 1.8 million for 1960. During processing, sample data were weighted so that numbers approximate complete population counts. PUMs weighted sample numbers compare well with published Census population counts, and age and age by gender percentages for each decennial sample reflect those of the total population.[2] Percentages and age-specific participation rates are emphasized,[3] and for simplicity, population numbers are often rounded to the nearest thousand persons (with percentages and rates calculated from unrounded numbers).

Other historic sources for the study include published data from past decennial censuses and information from the Census Bureau's Current Population Surveys (CPS).[4] Supplementary information was obtained from the U.S. Department of Education Center for Education Statistics, and through ERIC-

system literature searches.

Projections of future age-specific population size are those most recently published by the Census Bureau. The projections use 1988 as the base year, and rely on the cohort-component method to project population numbers. The projections are for July 1 of each year and are based on age-, gender- and race-specific fertility, mortality and net immigration levels. The Bureau's "middle series 14" projections (with moderate fertility, mortality and net immigration assumptions) are used here.[5] Future postsecondary participation rates and numbers of degree-seeking students are based on Census Bureau age-specific population projections and historic analyses of cohort-specific high school graduation and postsecondary enrollment rates.

Variable Definitions and Interpretative Notes

Baby boom and other age-cohorts. The baby boom was prompted by several interrelated forces including the relatively small size of the cohort that preceded it, the Great Depression of the 1930s with its hardships and low birth rates, World War II and the optimistic outlooks of the 1940s - early 1960s, together with the trend of larger families. While some suggest that the baby boom began following WWII (late 1945) and continued through the mid-1960s, there is evidence that the boom started earlier (Figure 1). Births were highest between the mid-50s and mid-60s, declining through the remainder of the 1960s, and more sharply in the '70s despite the fact that the oldest of baby boomers were by then well into their child-bearing years.[6]

[insert Figure 1 about here]

To capture the baby boom, and to emphasize young-to-middle-adulthood transitions, age is most often reported here in five categories, i.e., under

age 20, 20-29, 30-39, 40-49, and age 50 and older. This scheme allows for fairly easy tracking of birth and age-cohorts over several decades (although it should be kept in mind that with this classification the very youngest of the baby boom population are grouped with the cohort immediately following them, and a few pre-baby boomers are grouped with those born earliest in the boom period). Following this classification all baby boomers born by 1960 were in the under 20 category in 1960, with the earliest baby boomers in the 20-29 category in 1970 and age 30-39 by 1980. Later baby boomers were under 20 in 1960 and 1970, and age 20-29 in 1980. The very youngest of the baby boom (those born in the early '60s) were still in their teens and of traditional school age in 1980; the cohort immediately following them was mostly of elementary school age in 1980.

As illustrated later, knowledge of characteristics of the younger cohorts during the period 1960 - 1980 allows for projections of their representation in the age 50+ cohort in future years. For ease in tracking the baby boom cohorts, the baby boom is banded by astericks (***) in the time-series data tables included in the report.

Other time-series variables. To discern historic participation patterns of baby boom and other age-cohorts, their schooling levels and school enrollment rates are tracked from 1960 through 1980. For greater insights, the study also provides historic schooling and enrollment data by gender and minority-status. Projections for postsecondary degree-seeking enrollments for the years 1990, 2000 and 2010 are based on this analysis.

Key variables for historic time-series analysis are from the 1960, 1970 and 1980 decennial censuses. The variables include schooling completed, enrollment status, sex, race and Spanish-origin (or surname). During data processing the "minority-status" variable was created from race and Spanish-

origin variables, with minorities including all non-Whites and Hispanics.

Census Bureau definitions and important interpretative notes on these population characteristics are included in Appendix A. Because other sources often publish enrollment data for the fall term, it is worth noting here that decennial census enrollment figures are for the spring term.

Additional characteristics reported for 1980. To avoid over-generalization among minorities, the report includes 1980 data on education characteristics of minority sub-groups, by race and Spanish-origin. For additional insights on enrollment patterns, 1980 age-specific enrollment rates are reported by place of residence (metro, non-metro), employment status (employed, not employed), poverty status (in poverty/marginally close to poverty, not in poverty), and interstate migration status (migrant, not migrant). Census definitions, coding schemes and interpretative notes for these 1980 population characteristics are also included in Appendix A.

TRACKING THE BABY BOOM

Population Growth and Age Shifts

By virtue of sheer size alone, baby boom cohorts will have significant influence on society as they age. Median age is rising steadily, with one-half the U.S. population projected to be over 40 before 2020 (Figure 2). By the year 2000, those born during the baby boom will all be in their 30s, 40s and 50s, with those cohorts accounting for 42% of the population (Table 1A).

Thirty-year change data (Table 1B) show that while population numbers increased by almost 43% between 1920 and 1950 and another 50% from 1950 to 1980, growth is projected to slow between 1980 and 2010 (25% increase) and considerably more later (7% increase, 2010 - 2040). Even with slower growth, population numbers for all age-cohorts will remain far above pre- and early-baby boom levels in the foreseeable future, with numbers in older cohorts (age 30+) increasing substantially over 1980 levels and numbers in younger cohorts declining over time.

[insert Figure 2 and Tables 1A and 1B about here]

Pre-baby boom to early-baby boom change (1920 - 1950). As reflected by change data for the period 1920 - 1950 (Table 1B), heavy immigration offset the considerable birthrate decline of the 1920s and 1930s resulting in some growth in numbers of teenagers and younger adults (approximately 9% increase for 10-19 age-cohort, 30% for those 20-29, 44% for those 30-39).[7] At the same time, and mostly because of declining mortality and increasing life expectancy, numbers of older adults swelled (109% increase for the age 50+ cohort and 59% increase for those 40-49). By 1950, the baby boom had increased numbers in the youngest cohort by 28% over 1920. Although the baby boom had begun, growth in older cohorts had stronger influence; the oldest

cohort jumped from 15% to 22% of the total population (+7 percentage points) while the youngest cohort lost 2 percentage points. Numbers in all cohorts had grown, but changes in the percent distribution of the population (Table 1B) show that the age 40-49 cohort increased by about 11% and the 50+ cohort by 46% while the 10-19 cohort and the 0-9 cohort decreased by almost 24% and 11%, respectively. With these changes, it is not surprising that U.S. median age rose from 25.3 to 30.2 between 1920 and 1950 (Figure 2 and Table 1A).

Early-baby boom to post-baby boom change (1950 -1980). Thirty years later in 1980, when the youngest of the baby boom were still in their teens, numbers in all cohorts were still on the rise (Table 1B). Numbers in the 10-19 age-cohort increased almost 81% over 1950, with those in their 20s up 71%, and those in their 30s up 38%.[8] With so many people in their 20s and 30s, it is not surprising that numbers of young children continued to grow (12% increase); far greater growth had been expected, but trends of delayed marriage/child-bearing, smaller families and childless couples intervened -- and these trends have continued in the 1980s.[9] As in the pre-baby boom period, mortality declines sustained growth in numbers of older people. Dropping some in 1960 and 1970 when the majority of baby boomers were still in their youth, U.S. median age climbed back to 30 by 1980 (Figure 2 and Table 1A). Changes in the percent distribution of age-cohorts, 1950 -1980, show this movement toward the middle years, with the percentage increase in the oldest cohort partially offset by the decrease in the youngest (post-BB) cohort, and the percentage decrease in the 40-49 (pre-BB) cohort offset by the increase in the 10-19 (late-BB) cohort (see Table 1B).

Future age change (1980 - 2040). Recent changes in the age structure of the population provide important insights on what we can expect in the future. As noted in Table 1B, the present period (1980 - 2010) offers considerable

challenge to a society and schools that were expected to serve so many youth, and now must adjust to relatively fewer young people and far more older citizens. Already, we have experienced some of these changes.

Census Bureau middle-series projections show that by 2010 U.S. median age will increase to 39.0, with numbers and proportions in older cohorts growing substantially, and cohorts of traditional postsecondary age declining somewhat (Tables 1A, 1B).[10] Between 1980 and 2010 numbers of adults in the 30-39 cohort are projected to increase by about 15%, with older cohorts gaining many more people (+79%, age 40-49; +64%, age 50+). For the same period numbers of young adults, age 20-29, are projected to decline by about -5% and numbers in the 10-19 cohort by about -7%; a slight increase in numbers of young children is projected (about 2%, age 0-9). Changes in percent distributions, 1980 - 2010, show the movement toward upper middle age, with all four younger cohorts declining and the cohorts age 40 and older representing increasing proportions of the total population.

Longer-range projections for the period 2010 - 2040 show less dramatic change. However, the cohorts born in the 1970s, '80s and 90s (together with baby boomers who are still alive) are projected to increase numbers in the oldest 2040 cohort by about 28% over 2010 levels with people age 50+ representing two-fifths of the 2040 population.[11]

Racial and Ethnic Change, 1980 - 2040

The vast majority of baby boom births were in the White, non-Hispanic population. Since that time, there have been steady increases in the size of other racial groups and of the Hispanic population. Census Bureau middle-series projections show the proportion of Whites in the U.S. population declining from about 86% in 1980 to 77% in 2040, while the percent of Other

Races (including American Indians, Eskimos, Aluets, Asians, Pacific Islanders and others) more than triples (2.3% to 7.8%), and the percent of Blacks increases from about 12% to 15% (Figure 3A).[12] Projections show the Hispanic proportion of the population (who may be of any race) increasing from 6% in 1980 to 15% by 2040 (Figure 3B).[13] These shifts in the racial and ethnic composition of the population are the result of the combined effects of projected differences in numbers of women of childbearing age and fertility, mortality, and net immigration rates for each group over time.

[insert Figure 3 A-B about here]

Especially relevant to education planning, these effects cause differences in the age-structure of population sub-groups. For example: with the aging of the large, mostly White non-Hispanic baby boom population, 1990 median ages for Blacks and Hispanics are projected to be younger (about 5 and 7 years, respectively) than the median for the total population. Projections show age differences widening until about 2010, and narrowing in the decades that follow. In 2010, Black median age is projected to be 6 years -- and Hispanic median age almost 10 years -- younger than that of the total population.[14]

HISTORIC EDUCATION PARTICIPATION TRENDS OF BABY BOOM AND OTHER COHORTS

Overview

With the aging of the baby boom population and the many changes of the 1960s and '70s, there has been great change in education participation rates and patterns -- especially at the postsecondary level. The effects of such large numbers of young people coupled with parent's aspirations for their children, labor force needs for highly skilled workers, military draft exclusions for students, and demands for equal economic opportunity and social justice caused postsecondary institutions to open their doors widely, with unprecedented growth in student numbers and considerable change in the composition of the student population.

As we shall see, changes were especially great in the decade of the '60s as early baby boomers (and those born just before the boom) took advantage of the many educational opportunities available to them. Considerably less enrollment growth occurred in the decade of the '70s as younger baby boomers faced increasingly stiff competition from older cohorts, and as enrollment-inflating effects of the Vietnam war, economic affluence, student aid, and an open job market diminished. With this slower growth, changes in the composition of the student population accelerated. The continued emphasis on opportunities for racial-ethnic minorities, rapid increases in numbers of women entering the labor force, and technology-induced change which made recurrent education a necessity all had their influence; as a result, proportions of older students, women and minorities increased markedly.

Schooling levels of the population climbed concommittantly and trend data suggest that enrollment saturation factors are at work, with many citizens having so much degree-oriented schooling as to make the need for more less compelling. Still, differences in schooling levels by gender, minority

status, geographic location and personal circumstance remain, and data show that sub-groups of the population are striving to "catch-up". We turn now to these historic participation trends which, together, provide the foundation for judgments about future participation in postsecondary education.

U.S. Enrollment and Educational Attainment Trend Data, 1960 - 1980

Time-series comparisons, U.S. population. Over the period 1960 - 1980, school enrollments grew at a considerably faster rate than did overall population size with U.S. population numbers increasing by 26%, and school enrollments increasing by about 43% (Figure 4 and Table 2A). Although total population size increased about the same amount each decade (about 12%), there was considerably greater overall enrollment growth in the 1960s (+36%, 1960-70) than for the decade of the '70s (5% increase, 1970-80). As baby boom cohorts aged and numbers of youth under age 20 declined (6% decrease, 1970-80), total numbers of enrollments for this youngest cohort declined less (-2.6%, '70-'80), while adult enrollment numbers continued their upward climb. School enrollment growth was no longer attributable to youngsters, but rather to the adult population.

[insert Fig. 4 and Table 2A about here]

Enrollment numbers for the 20-29 age-cohort increased by over 2 million each decade, and as the earliest of baby boomers increased population numbers in the 30-39 age-cohort by just over 40% between 1970 and 1980, enrollment numbers jumped four times that much (165% increase). Enrollment numbers increased faster than growth in the size of the older population as well: even with a 5% loss in the size of the 40-49 age-cohort, 1970-80 (recall that the pre-baby boom birth cohort was quite small), enrollment numbers swelled by

over 170%, and there were considerable enrollment gains for the age 50+ cohort as well. To be expected, enrollment numbers for older adults were smaller than those of younger adults and children, yet enrollment numbers for people age 30 and older were over 3 million by 1980 (32% of all adult, age 20+ enrollments). The vast majority of these were postsecondary enrollments (Figure 4 and Appendix B).[14]

As enrollment numbers soared, proportions of the population who were enrolled increased too. Enrollment rates show increases for each age-cohort, with greatest rate gains occurring between 1960 and 1970, especially for younger cohorts, and considerable gains for older cohorts between 1970 and 1980 (Table 2B, overall rates). But effects of the early baby boom were subdued by 1980 (all had aged beyond traditional school/college age), and past enrollment inflating influences had waned (i.e., labor force demands for college graduates, the Civil Rights Movement and the Vietnam War). These changes are reflected in overall enrollment rate shifts: while age-specific rates continued to climb, the school enrollment rate for the entire U.S. population fluctuated, increasing from .2443 to .2943 in the '60s and then dropping back to .2768 by 1980 (Table 2B and Figure 5).

[insert Table 2B and Fig. 5 about here]

A more detailed table shows the substantial changes in postsecondary enrollment numbers and rates (Appendix B). Enrollment numbers for teenagers with high school completed increased by about 163% between 1960 and 1980, numbers of those age 20-29 (with high school) jumped almost 300%; and although representing much smaller numbers, enrollments for older cohorts increased even more (+700%) (see Appendix B, part B, change item C). Appendix B shows the extent to which postsecondary enrollment rate changes outpaced those of

elementary and secondary education. There was a 28% gain in proportions of teenagers enrolled in postsecondary education, more than a 58% gain in the proportion of the 20-29 age-cohort enrolled, and more than a 300% rate increase for the 30-39 age-cohort, 1960 - 1980, with older cohorts showing even greater rate changes (Appendix B, part B and C, change item B). (Note that April decennial Census reports of postsecondary enrollments approximate National Center for Education Statistics Fall reports, and that some argue both under-estimate the total numbers of students annually.)[15]

Greatest growth in postsecondary enrollments can be attributed to the wave of early baby boomers who entered college by 1970 or who by 1980 were age 30-39 and returned to school as "non-traditional students".[16] Far less growth occurred when younger baby boomers entered postsecondary schools. With this in mind recall that for the three periods, overall school enrollment rates were lowest in 1960, highest in 1970 and dropped some by 1980; this suggests that "saturation" factors are at work. Closer inspection of enrollment rates by level of school completed (Table 2B) reveals that while enrollment rates for each age-cohort grew rapidly in the '60s and less so in the '70s, for these decades they have also been highest at the undergraduate level, dropping off substantially once four years of college is completed.

The saturation theme evident in these data deserves additional comment. Previous studies have shown that past formal schooling is the best predictor of adults' future participation in educational activity, with those of highest schooling levels most likely to participate.[17] Data reported here suggest the need to elaborate on that observation: it is no doubt true that advanced levels of schooling make people better prepared and more likely to participate in a wide variety of continuing learning activities; however, once a certain amount of degree-oriented schooling is achieved, they are less likely to seek

more degree-oriented schooling. The saturation point for formal schooling has shifted upwards over the years, moving from elementary credentials through high school, and presently it appears to be around the baccalaureate level. An "horizontal" trend is now cross-cutting this, softening effects of vertical saturation: with stiff competition for jobs, technical obsolescence, professional "burn-out" and early retirements, a number of people are returning to postsecondary schools for new (and sometimes lower-level) credentials (e.g., short-term vocational programs, computer proficiency, small business management, humanities and aesthetic appreciation programs).

Schooling and enrollment by gender.. Schooling levels increased greatly as school enrollments grew, and as people with lower schooling levels were lost from the population (i.e., mortality of the elderly). For the population age 25 and older, the median number of years of school completed was a full two years higher in 1980 than in 1960 (12.5 vs. 10.5) with greatest gains made during the 1960s (Table 3A). Medians show male schooling levels increasing more than those of females, but men started from a lower base (1960 male median years of school completed = 10.3, female = 10.7; 1980 male median = 12.6, female = 12.4). By 1980 a slightly greater percent of men (67.3%) than women (65.8%) had completed high school, and a considerably greater percent possessed four or more years of college-level schooling (20.1% male, 12.8 % female).

[insert Table 3A about here]

The gender difference in high school completion is not because of recent factors, rather it is because there are more elderly females with less schooling in the population (effects of different life expectancies for men and women). With normal population attrition, we can expect this difference

to soon be eliminated (or possibly to reverse because of the somewhat higher secondary school drop-out rates of males.)[18]

As noted in Table 3B, the gender difference at the highest schooling level will lessen too. By 1980, slightly more women than men were enrolled in their first through fourth year of postsecondary schooling, with enrollment rates for late baby boom females just beginning college higher than for males and with rates for women, ages 30 and older, also higher than rates for males. Assuming that they were retained in postsecondary schools in the '80s, these women are eligible to pursue higher levels of schooling (or are already doing so). Evidence of this "catch-up" trend surfaced as early as 1970 and more strongly in 1980, when enrollment rates for older females (age 30+) with four or more years of college surpassed those of males (Table 3B).[19]

[insert Table 3b about here]

Schooling and enrollment by minority status. Similar "catch-up" trends are evident when enrollment rates and schooling levels of racial-ethnic minorities are contrasted with those of the white, non-Hispanic population (Table 4). Continuing the trend begun in the '60s, by 1980 minority enrollment rates at all schooling levels and for all age-cohorts--except the youngest--were higher than for non-minorities. Numbers of first-year postsecondary minority students jumped from 68,000 to 728,000 between 1960 and 1980, with numbers of minority students in their second through fourth year of college increasing by over a million (from 120,000 to 1.38M) and minority enrollments at higher levels increasing from 28,000 to 360,000. Overall, the percent of the minority population enrolled in postsecondary education was about 6% in 1960, and had climbed to 15% by 1980.

[insert Table 4 about here]

Higher secondary school drop-out rates for Hispanics especially, and for Blacks, account for the lower minority enrollment rates in the youngest age-cohort. But in 1970, and more noticeably in 1980, postsecondary enrollment rates for older minority age-cohorts were higher than those for non-minorities -- suggesting that many who drop out as teenagers return at older ages to "catch-up", by first completing high school, and then pursuing postsecondary studies.[20]

Figure 6 and Appendix C display 1980 schooling data for minority sub-groups. Median schooling levels for persons 25 and older show Asians-Pacific Islanders at 13.0 years, Whites at 12.5 (same as total population), American Indians-Eskimos-Aleuts at 12.2, and Blacks at 12.0. Of the four racial groups, Asians are over-represented in the highest schooling category (4+ years of college), with Blacks and the Native American group under-represented. Hispanic schooling levels are lower (median = 10.8 years), with over one-half of those age 25 and older lacking high school credentials in 1980 (Appendix C, Table C1).[21]

[insert Figure 6 about here]

With two exceptions, minority sub-groups have similar postsecondary enrollment patterns across age-cohorts -- patterns that reflect "catch-up" and "saturation" trends (see Appendix C, Table C2). In 1980 first through fourth year college data show Blacks and Native Americans had: lower enrollment rates than Whites at ages 18-19; rates similar to Whites at ages 20-29; and rates higher than Whites at ages 30 and older. Age-specific enrollment rates for the fifth year and subsequent years of college studies are mostly lower among Blacks and Native Americans than Whites. People of Spanish-origin, who

may be of any race, show postsecondary enrollment patterns similar to those of Blacks and Native Americans. Thus it appears that postsecondary participation levels for Whites approach "saturation" at younger ages, while minorities are striving to "catch-up" at older ages. Minority enrollment rates at highest college levels can be expected to rise when there is a larger pool of those who have successfully completed undergraduate programs -- assuming they also have the desire and means to pursue more schooling.

Note that the relatively small but growing Asian racial group -- which had highest postsecondary enrollment rates in 1980 at all ages and college levels -- stands as an important exception to these minority trends. Another exception needs mention: the oldest cohort of Native Americans (age 40+) shows an enrollment rate higher than those of Whites, Blacks or Hispanics at highest postsecondary levels (5th year of college+).

U.S. Education Participation Profiles, 1980: Enrollment Rates by Selected Population Characteristics

Overview. Recent educational participation profiles are displayed in Appendix D. The table summarizes 1980 age-specific enrollment rates of the U.S. population by schooling level, gender and minority status, and introduces enrollment rates according to five additional population attributes including metropolitan vs. non-metropolitan residence, and employment, poverty and interstate migration status (see Appendix A for Census definitions). In 1980, enrollment rates were generally higher for people: who lived in metropolitan areas; were not employed; had incomes below the poverty line or marginally close to it; or lived in a different state five years earlier. These findings and some noteworthy exceptions are elaborated below, along with "recurrent" education, "catch-up" and "saturation" themes that help to explain them.

Metropolitan vs. non-metropolitan residence. In 1980 metropolitan

enrollment rates were consistently higher than non-metro rates across all age-cohorts. Two interrelated explanations are central: metro areas support a larger, more diverse labor force with more demand for highly skilled occupations; and more densely populated areas usually offer greater postsecondary educational opportunity than do smaller places.[22]

Employment status. In 1980 people not employed generally had higher enrollment rates than those who were employed. This is mostly due to the influence of enrollments of young full-time students (childhood through age 29); however for older cohorts about the same proportion of students, ages 30-49, are employed as not, and students age 50 and older are about twice as likely to be employed as not. (Note that the "not employed" category pools unemployed people with those "not in the labor force"; another study shows different enrollment patterns for these two groups).[23]

Poverty status. Generally, enrollment rates were higher for people whose 1979 household income placed them in or marginally-close to poverty (as compared to those with incomes 25% or more above the poverty line).[24] When age is considered, discrepancies in enrollment patterns by poverty status are greatest at youngest ages: people age 20-29 and in poverty are more likely to be enrolled, while youth under 20 and in poverty are somewhat less likely to be enrolled (with the latter mostly because many secondary school drop-outs are also poor). Higher enrollment rates for the age 20-29 "in/near poverty" group merit two explanations: some young adults from more affluent backgrounds are in poverty simply because they are students; others were raised in poverty and seek education as a means to escape it.

These poverty data are intriguing because studies prior to 1980 showed low-income people as under-represented among adult education participants.[25] In part, these differences in findings are because previous studies of adult

participation often included a wider array of learners involved in educational offerings of many organizations (i.e., not only degree offerings of schools and colleges, but also formal and informal educational offerings of employers, churches, civic groups, etc.). But other factors also contributed to findings reported here, for example: in 1980 effects of the national recession were strong, and many who were either un- or under-employed enrolled in vocational schools and colleges while waiting for jobs; inflation ate into pocketbooks of groups who frequent education (e.g., school teachers and aides, health and social work personnel seeking recertification or advanced degrees), causing some families with only one income to slip into or close to poverty; and dwindling student aid programs emphasized "need-based" eligibility, favoring people of lower income backgrounds (especially minorities and single women with children)--and this aid was not enough to move people out of poverty.[26]

Interstate migration status. Interstate migration was especially prevalent during the 1970s when all but the youngest of baby boom cohorts were in their 20s and 30s -- and they were the people most likely to make major moves. With higher school enrollment rates of those birth cohorts, it is therefore not surprising that interstate migrants show higher 1980 participation rates than do non-migrants. Interestingly, migrant enrollment rates are higher than non-migrant rates across all adult age-cohorts. For a few adults over 40 the primary motivation for moving across state lines is to attend an out-of-state school, but far more move for other reasons. This suggests the tendency of newcomers to seek educational experiences which aid them in fulfilling new job responsibilities, learning about their community, and making new acquaintances.[27]

Summary patterns. As with earlier discussions of age-specific enrollment patterns by schooling level, gender and minority status, the general trend of

"recurrent education" and "catch-up" and "saturation" themes combine to help explain many of these findings. For example, higher enrollment rates of adults who are poor, or not employed, suggest that they are striving to "catch-up" through first-time or "recurrent" postsecondary studies, perhaps in hopes that education will make them more competitive in the job-market, result in a more comfortable income or, simply, a more satisfying life. Migrants engage in "recurrent" and "catch-up" education to help prepare them for a new life-setting, change in job responsibility, etc.. In contrast, the somewhat lower enrollment rates of non-migrants, employed and higher-income people suggest that "saturation" factors are at work, with these adults possessing education adequate for their circumstances. For the same reason "saturation" factors help to account for lower enrollment rates among people in non-metropolitan areas (along with the more common explanation of their sometimes limited access to postsecondary offerings).[28]

Distinctions Among U.S. Regions, 1980

Because circumstances are not the same throughout the country and national enrollment patterns can mask those of smaller areas, some regional profiles are provided here. Appendix D contains 1980 data on the four Census Bureau regions of the U.S., and regional profiles are briefly compared here.

In 1980, the West and South showed greatest education-related contrasts. The South is the most heavily populated region, with greatest percentage of Blacks and many Hispanics. When compared to other regions the South had a lower median schooling level, a smaller percentage of high school graduates, and relatively low school enrollment levels at all ages. The West had smallest population size and was youngest, with just over one-half its population from baby boom cohorts. Subject to heavy in-migration in the '70s (which brought many young, highly-schooled adults), the West had highest

median schooling and high school graduation levels in 1980. With its many baby boomers and Hispanics, Asians and Native Americans, its enrollment pattern is mixed: a considerably higher percentage of people age 25-34 were enrolled in the West than elsewhere, but the region also had lower enrollment levels for people between ages 19 and 21.

Between extremes of the South and West, the Northeast and Northcentral regions better reflect national schooling and enrollment patterns, with identical median schooling levels and fairly-comparable school enrollments. When compared with the other two, both Northeast and Northcentral regions have smaller minority populations and school enrollments that are especially high for teenagers. Compared to all other regions, the predominately urban Northeast (with a median age more than two years older than other regions) shows high levels of enrollment for young adults of traditional college age. The less-urban Northcentral region has the lowest percentage of minorities, highest percentage of high school graduates, but a lower percentage of people with four or more years of college than other regions.

With variations in historic circumstance and population composition, states' educational profiles can easily differ from those of the nation or the region in which they are located. As we turn to discussion of future nation-wide participation in postsecondary education, it will be useful to keep such circumstances in mind. To the extent that particular southern states reflect trends of the Southern region, it is likely that "catch-up" factors will be operating in them for a number of years to come. In contrast, some Western, Northeastern and Northcentral states may have already reached the "saturation-point" in postsecondary enrollments. Circumstances in local areas and of particular postsecondary schools must also be considered, as there are numerous exceptions within states.

FUTURE PARTICIPATION IN POSTSECONDARY EDUCATION OF BABY BOOM AND OTHER COHORTS, 1990 - 2010

Overview

Two alternate sets of age-specific postsecondary enrollment projections are included here for degree-oriented students, nation-wide, in Spring of the years 1990, 2000 and 2010. A procedure for hypothesizing future age-specific enrollment patterns and making rough estimates of future enrollment size is described. The procedure can be easily replicated or adapted, and captures the enrollment influences of baby boom cohorts as they progress through middle-age and begin to approach retirement.

The first projections set is based on the assumption that postsecondary participation rates will be the same in the future as those observed in 1980. The second set is based on a scenario which assumes that future participation rates will be slightly different than the past, with age-specific rates adjusted to accomodate trends of "recurrent" education, "catch-up" and "saturation". The age-specific pool of high school graduates that will be eligible to participate in degree-oriented postsecondary education programs is identified first. Then alternate postsecondary enrollment rates are established, with enrollments estimated for baby boom and other cohorts for the years 1990, 2000 and 2010. Expected shifts in the composition of the student population are described, and brief comments are offered about forces likely to influence enrollments at state and institutional levels.

The exercise of preparing enrollment projections is a planning tool, and the scenarios presented here are but two of several hypotheses that could be offered about postsecondary education participation patterns in the future. While well-informed by historical data and analyses, they rest on three progressive sets of assumptions, first, about future population size and age-

distribution, then, about the size of the pool of high school graduates from which to draw students, and finally, about future postsecondary enrollment rates of age-cohorts. Each of these is subject to error, with postsecondary enrollments most vulnerable.

The national projections are especially relevant to planners and policy-makers at that level, and enough data are included here so that they can address the question "what would future enrollment patterns and numbers be like if different assumptions were made about the future?". The projections also provide the context for regional and local comparisons. Smaller-area studies would be most useful, especially in states and institutional service areas where present educational profiles, demographic or socio-economic circumstances differ from those of the nation. Planners from such areas should keep these differences in mind as we turn to the national projections.

Estimates of the Population Pool Eligible for Postsecondary Education

Enrollment projections for baby boom and other birth cohorts are based on total numbers of people expected in future age-cohorts, and within those, the smaller number that are eligible to participate in degree-oriented postsecondary education programs by virtue of having completed high school. Age-specific population projections for 1990, 2000 and 2010 are provided in Appendix F, Table F1. With so baby boomers having had one or two children of their own and with the somewhat higher fertility rates of the many minority women now of child-bearing age, there will continue to be large numbers of young people in the population through 2010. However, with the aging of the baby boom and overall decline in U.S. fertility, numbers in oldest cohorts will increase substantially between 1980 and 2010, as will their proportional share of the nation's population while, at the same time, the proportion of children and teenagers in the population declines.

Appendix F (Table F2) contains estimates of high school graduates in each age-cohort, 1990 - 2010. Cohort-specific high school graduation rates are carried forward from the 1980 base year, under the assumption that these rates will not change substantially between now and the year 2010. This assumption is based on several considerations. Although youthful high school graduation rates increased between 1960 and 1980, data through 1985 show that high school graduation rates for teenagers and those in their early 20s have hovered around 1980 levels. With increasing proportions of minorities in young age-cohorts and their higher drop-out rates, higher graduation rates are not anticipated for those cohorts.[29] And while graduation rates of older cohorts also increased between 1960 and 1980, saturation effects are assumed: with less funding for adult literacy programs in recent years, and an increasing labor force demand for a unskilled and entry-level workers, no substantial change is anticipated in high school graduation rates of older cohorts.

Even with this modest assumption, numbers of high school graduates and the graduation rate for the total population increase substantially between 1980 and 2010 (Appendix F, Table F2). With proportionally fewer young children in the population, loss of elderly people with lower graduation rates, and baby boom cohorts carrying forward higher graduation rates as they age, the high school graduation rate for the total population is projected to climb from .4895 in 1980 to .6233 in the year 2010, with numbers of people eligible for postsecondary participation increasing from about 111 million to 176 million over the same period.

Future Enrollments: Alternate Scenarios for 1990, 2000 and 2010

Trends. Age-specific postsecondary enrollment trends for the U.S., 1960 - 2010, are plotted in Figure 7(A-B). Historic trend-lines for age 30 and

older cohorts show that the proportions of high school graduates enrolled in college climbed steadily upward from 1960 to 1980. The percentage of age 20-29 high school graduates enrolled in college increased substantially between 1960 and 1970, but only slightly between 1970 and 1980. In contrast, postsecondary enrollment percentages for teenagers jumped sharply between 1960 and 1970, and then declined markedly between 1970 and 1980.

[insert Figure 7A-B about here]

There were a number of influences which help to explain these historic enrollment trends, and which also provide insight for the future (see Figure 8).[30] The 1960s were times of great change in the U.S. There were many more young people than ever before, the economy was strong, and the population was becoming quite mobile. There was turmoil as the Civil Rights Movement gained momentum and as the nation became involved in an undeclared war. There was questioning of authority, a re-awakening of idealism, and concern for public issues and public welfare. The times were ripe for learning and the advanced education of common people, causing postsecondary institutions to open their doors widely to accomodate unprecedented numbers of students. The vast majority of these students were in their teens and 20s, but a number of older people took advantage of the open doors as well.

The consequences of changes in the 1960s lingered, but by 1980 as the nation sought stability, enrollment-inflating effects had diminished and the economy faultered while attempting to integrate so many. Soon after, the G.I. Bill expired, migration slowed, and college tuition costs began to climb.[31] Those born mid-way in the baby boom faced stiff competition for jobs -- not only among their contemporaries but also with the millions born a few years earlier. Those born late in the boom and just after are facing even more

competitive circumstances, especially during the decades of the 80s and 90s (when they are in their 20s and 30s, and early baby boomers are in their 40s and 50s). Around the year 2000 some opening of the labor force is anticipated -- which will be to the special advantage of the small cohort born just after the baby boom since labor demands may exceed numbers of available workers.[32]

[insert Figure 8 about here]

Because the 1960s were so exceptional and adjustments followed during the 1970s, 1980 was chosen as the base year from which to make enrollment projections. By virtue of this decision one generally assumes that postsecondary enrollment rates will be higher in post-baby boom times than they were before the boom started, but are not likely to be as inflated as they were in 1970. With this in mind, two alternate sets of age-specific postsecondary enrollment projections are included here. They are for U.S. degree-seeking students in Spring of the years 1990, 2000 and 2010.

Scenario one. As illustrated in Figure 7A, the first projections set is based on the assumption that age-specific postsecondary participation rates will be the same from 1990 to 2010 as they were in 1980. This simple assumption allows one to see what effects might be expected if enrollment patterns of baby boom birth cohorts were to mimic those of earlier birth cohorts as they progress through middle-age and begin to approach retirement. Results are detailed in Table 5A, where numbers of postsecondary students of varying ages are estimated for Spring of 1990, 2000 and 2010. Even with slightly fewer high school graduates under age 30 in the population and no change in age-cohort enrollment rates after 1980, this scenario shows that college enrollments will increase by about one million between 1980 and 1990 before beginning to level off. Higher numbers of students from the 30-39 and

40-49 age-cohorts account for most of the enrollment growth between 1980 and 1990, with those students drawn from the large eligibility pool of baby boom high school graduates.

[insert Table 5A about here]

Scenario two. As shown in Figure 7B, the second projections set is based on the assumption that there will be minor age-specific enrollment rate changes between 1980 and 2000, with rates stabilizing after that. Other sources generally agree that only minor changes are likely.[33]

Most basically, Scenario 2 assumes that baby boom cohorts will have slightly different enrollment patterns than pre-boom cohorts, that patterns for those born just after the boom will be different than baby-boom patterns, and that female -- and especially, minority -- patterns will continue to effect overall enrollments. Adjusted age-cohort enrollment rates and estimated enrollment numbers for Scenario 2 are displayed in Table 5B. Note that in this scenario there are lower numbers of teenage students and higher numbers of older students than in Scenario 1 projections, with overall enrollments increasing by almost 1.5 million between 1980 and 1990, declining some in the year 2000, and reaching an all-time high in the year 2010.

[insert Table 5B about here]

Demographic and socio-economic factors influencing the enrollment rate adjustments made in Scenario 2 are summarized in Figure 8. More detailed reasons for cohort rate changes -- which follow the "catch-up" and "saturation" themes introduced earlier -- are provided here:

> **Teenage cohort (< 20)**: In this scenario the teenage enrollment rate declines 1.5 percent between 1980 and 1990, and another three-quarters of a percent between 1990 and 2000, before leveling off. Rising demands for unskilled workers (and extreme labor force competition among the college-

educated), increasing tuition costs, effects of a greater proportion of young minorities with their higher secondary school drop-out rates, and the desire of older teens to "stop-out" and gain life experience outside the school setting combine to explain these rate-declines. From 1980 until almost 2000 saturation effects are assumed, especially because there is an excess of late baby boom college graduates in the market for jobs, so suitable labor force positions for younger graduates are scarce and salaries relatively depressed.

Age 20-29 Cohort: The enrollment rate creeps upward one-quarter of a percent (.25%) in the 1980s and another .25% in the 1990s before stabilizing in the year 2000. "Catch-up" factors (e.g., for those who completed high school late or "stopped-out" before pursuing postsecondary studies) and trends of part-time studies and extended time to complete college degrees account for these projected rate changes.

Age 30-39 Cohort: The enrollment rate for the 30-39 cohort increases one-quarter (.25%) of a percent in the decade of the '80s and then stabilizes in 1990. Students born late in the baby boom are mostly responsible for the rate increase, 1980-'90, and due to stiff labor force competition are taking time to pursue part-time studies, vocational certification, or an advanced degree. Later in the projection period the labor force begins to open and smaller post-baby boom cohorts who were unable or chose not to attend college at younger ages attempt to "catch-up", thus sustaining the 1990 age 30-39 enrollment rate.

Age 40-49 Cohort: The enrollment rate increases by three-quarters of a percent (.75%) between 1980 and 1990, then drops back one-half of a percent (.5%) in the '90s before stabilizing in the year 2000. Women -- and minorities, especially -- account for the 1980-'90 rate increase as they engage in "catch-up" education; men and women with prior degrees who are making career changes also contribute to the rate increase. Later, the rate declines as saturation effects are assumed, but with the opening of the labor force those born late in the baby boom sustain an enrollment rate which is slightly higher than in 1980.

Age 50+ Cohort: The enrollment rate increases one-quarter of a percent (.25%) between 1980 and 1990 and then stabilizes. The 1980-'90 rate increase is due to women and minorities striving to "catch-up", trends of career change and early retirements, and desires to study for non-occupational reasons. Later, saturation effects are assumed because so many of the 50+ cohort are baby boomers with college credentials, but the higher 1990 rate is sustained because of retirement life-style changes, the potential for a related migration upswing, and the possibility of retirees being called back into the labor force (thus potentially in need of "refresher" programs or training for new jobs).

<u>Comparison with institutional reports and NCES projections</u>. Most recent institutional enrollment estimates published by the National Center for Education Statistics (NCES) are for Fall, 1988, and show about 12.9 million

students nation-wide.[35] This 1988 number is higher than the NCES "middle alternative" enrollment projection for Fall 1990 (12.6 M). The NCES "high alternative" projection for 1990 shows 13.1 million students, a number more closely approximating those of the two scenarios presented here -- especially when the minor discrepancy between decennial census and NCES enrollment reports is considered.[36] Comparable projections for the years 2000 and 2010 are not yet available from NCES.[37] Planners should keep in mind that the NCES projections are based on a combination of k-12 and postsecondary data from schools and colleges, nation-wide, together with Census Bureau "middle series" population projections, and rely on somewhat different assumptions and more complex projections methodology than those used here.

Composition of the Student Population

Both scenarios presented here imply greater change in the age composition of the postsecondary student population than in overall student numbers (see Table 6A-B).[38] Even with no change in age-cohort enrollment rates after 1980 (Scenario 1, Table 6A), the proportion of students age 30 and older rises from 24% to 35% by the year 2000 before beginning to level off. Scenario 2 (Table 6B) shows more pronounced age-shifts.

[insert Table 6A-B about here]

While detailed enrollment projections by minority status and gender are not included here, the trend toward greater representation of women and racial-ethnic minorities in the student population is expected to continue, and is especially emphasized in the rate-adjustments made in Scenario 2.[34] Although the proportion of minority enrollments in the teenage cohort is not anticipated to rise much until after 2000, profiles of students age 20-29 are expected to reflect the growing number of young minority adults in the U.S.

population through 2010, and older student profiles are expected to show a predominance of minorities and women into the 1990s. Equity concerns, economic forces and "catch-up" factors account for this continuing trend, but it is assumed that saturation effects will eventually cause enrollment rates for women and minorities to level off when educational levels are generally similar to those of males and non-minorities.

Discussed earlier, 1980 participation profiles showed that overall school enrollment rates were generally higher for people who lived in metropolitan areas, those not employed, those with incomes below or very near the poverty line, and those who were recent interstate migrants. Should similar participation patterns be expected in the future? Some thoughts are offered here:

-- With greater proportions of older students, two-income families, rising tuition costs, and the trend of extended time to graduation, we should expect more employed students in the future.

-- With greater proportions of minorities, and if the trend of a growing proportion of the population slipping into poverty continues (and if student aid programs keep up with rising tuition costs and favor need-based eligibility criteria), people in and near poverty should be expected to continue to show higher enrollment rates than those with higher incomes.

-- Although migration has slowed, following earlier trends those areas that are host to large numbers of newcomers should expect them to be over-represented in local enrollments. However, with school attainment levels creeping upward and enrollment "saturation" effects operating, the migrant, non-migrant enrollment rate difference is not anticipated to change much.

-- While not expected nation-wide, greatest likelihood for metro-, non-metro change is the possibility of higher enrollment rates in non-metropolitan

areas undergoing considerable change, e.g., local areas that are host to many in-migrants, experience economic activity requiring new job skills or the need for life-style changes and, importantly, also have (or develop) access to postsecondary programs.

In addition, "catch-up" and "saturation" themes suggest that states and local areas with 1) a high proportion of people with relatively low educational attainment levels, 2) growing labor-force needs for college graduates, and 3) adequate educational resources to meet the demand are the ones most likely to see greatest increases in postsecondary enrollments. The Southern region of the U.S. has considerable potential for increased enrollments if it is to achieve an educational profile more like that of other regions, but its desire and ability to do so will depend largely on whether the latter two requirements can be met.

Concluding Comments

Although national postsecondary enrollment levels are expected to soon stabilize, it cannot be assumed that this will be the case for all states and institutions. There are underlying forces which can be expected to influence future enrollment patterns and numbers, and deserve continuous monitoring. A few are mentioned here. Labor force trends and circumstances of local and regional economies are part of the picture. The accessibility of education -- in terms of costs, flexibility of scheduling, and geographic proximity -- is another. Evidence of educational relevance and quality, together with public perceptions of the value and prestige of postsecondary credentials is yet another. Related, there is the matter of the public's willingness and ability to invest in education. As baby boom cohorts reach retirement age, the dependency burden on younger adults will rise substantially and baby boomers,

themselves, can be expected to have many concerns other than education.

With this, we conclude our journey through the past and future and the investigation of age, life-cyle and education-related transitions of baby boom cohorts. Just as they did in their youth, baby boom cohorts promise to offer challenges to educational planners and policy-makers as they age. Unprecedented in size and the most highly schooled of all U.S. citizens, those cohorts also have the potential to offer incredible resources to help meet future challenges. States and institutions that stand to gain most are the ones that effectively harness this vast energy, taking creative, proactive steps to involve them in planning for and helping to direct the future of education along paths which serve our society and its citizens equitably and well. With this approach, states and institutions might also reap the added benefit of increased public confidence and support for education.

ENDNOTES

[1] The PUMs (version B) tapes for 1960 - 1980 were accessed through the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Madison. The tapes contain housing and personal characteristic records for a 1% sample of U.S. housing units and the people living in them.

[2] The 1980 weighted PUMs sample is less than one-tenth percent (<.01%) larger than the 100% count of people, the 1970 sample about one-tenth percent (.01%) smaller than actual count, and the 1960 sample about one-third percent (.33%) larger than actual count. Chi Square Goodness of Fit tests for proportional representation show each historic sample to be representative of the decennial year population on two key 100% count characteristics used in the study, i.e., age and age by gender. This is to say that age-cohort percentages for each decennial sample (and for males and females within each cohort) reflect those of the total population. The proportional representation application of Chi Square is justified in that the study controls for age and emphasizes population proportions and age-specific graduation and enrollment rates, and because Chi Square is unduly sensitive and difficult to interpret when applied to such large numbers as U.S. population counts.

[3] Enrollment rates are expressed as proportions of people within a category (e.g., an age-cohort) so that they can be used as a direct multiplier when converting to whole numbers.

[4] Current Population Surveys (e.g., the triennial adult education survey) are more detailed and more frequent than decennial censuses, but represent a much smaller national sample (about 60,000 households) and so are not available for states.

[5] Census Bureau, Current Population Reports, Series P-25, No. 1018, "Projections of the Population of the U.S. by Age, Sex, and Race: 1988 to 2080", Gregory Spencer, U.S. Government Printing Office, Washington, D.C., 1989. The report contains historic background, alternative assumptions about the future and information on a series of 30 projections sets. The "middle-series 14" projections are commonly used in studies such as this.

[6] Principles of Demography by Donald J. Bogue (NY: John Wiley and Sons, Inc., 1969, Chapter 6) discusses factors contributing to and sustaining the baby boom, and how the period differed from earlier ones. Also see the Dictionary of Demography, William and Renee Petersen, NY: Greenwood Press, 1986 (pp. 59 - 60); and The Population of the U.S., Historical Trends and Future Projections, Donald J. Bogue, NY: Free Press, 1985.

[7] See Donald J. Bogue, Principles of Demography (NY: John Wiley and Sons, Inc., 1969, pp. 133-137) for discussion of pre-baby boom times, concerns about dropping birth rates, and lack of precedent to foresee the coming boom.

[8] Note that the 1980 age 10-19 cohort includes the youngest of the baby boom population along with some born immediately after. About two-thirds of the 10-19 cohort, 1980, are baby boomers, with the remainder born after 1965.

[9] The crude birth rate (births/1,000 population) was 15.3 in 1986, 18.2 in

1970, and 25.2 in 1957. Although present U.S. fertility rates are below replacement, such factors as the large proportion of women of child-bearing age, declining mortality, and immigration will keep the U.S. above zero population growth for many years. Census Bureau Current Population Reports, Series P-25, No. 1006, "U.S. Population Estimates and Components of Change: 1970 to 1986" (issued May, 1987).

[10] Because so many of the 2010 population are already born and mortality rates continue to decline somewhat -- barring events like war or a disastrous epidemic -- only considerably higher fertility or noteable changes in immigration/emmigration would much alter these projections through 2010.

[11] With so many of the 2040 population not yet born, these Census Bureau projections have greater potential for error than shorter-range projections.

[12] Census middle-series projections, 1988 - 2080 (see note 5).

[13] Census Bureau Current Population Reports, Series P-25, No. 995, "Projections of the Hispanic Population: 1983 to 2080", Gregory Spencer, U.S. Government Printing Office, Washington, D.C. (issued Nov., 1986).

[14] Census middle-series projections (see notes 5 and 13).

[15] Fall counts by postsecondary institutions are reported in the Digest of Education Statistics, 1987, Thomas D. Snyder, National Center for Education Statistics, U.S. Department of Education, Tables 100-102, 222. The April 1980 decennial census shows about 1.5% more postsecondary enrollments (12,277,000) than do NCES reports for Fall 1980 (12,097,000). In How Americans in Transition Study for College Credit, (NY: College Entrance Examination Board, 1988), Carol B. Aslanian and Henry M. Brickell argue that in an effort to produce unduplicated annual headcounts Census Bureau and NCES single term counts are missing many students with "non-traditional" participation patterns, especially those who do not attend each semester.

[16] For adult influences on enrollments in different postsecondary sectors see note 15 sources and John G. Keane, "Higher Education: Some Trends Stressing the Need for Strategic Focus" (Continuum, Vol. 49, No. 2, Spring, 1985); Arthur M. Cohen, Community College Involvement in the Education of Adults (the Carnegie Foundation, ERIC doc. ED277428); Morgan V. Lewis and Lee Norton, Forces and Factors Likely to Influence Vocational Education: The Aging Population (National Center for Research in Vocational Education, Ohio State University, ERIC doc. ED266319).

[17] For a summary of studies see K. Patricia Cross, Adults as Learners, San Francisco: Jossey-Bass, 1981.

[18] In 1985, 12.3% of U.S. males age 14-34 were high school drop-outs without GED credentials as compared to 11.7% females, with higher proportions of female than male drop-outs in age 14-17 categories and higher proportions of male than female drop-outs in older age categories (Digest of Education Statistics, 1987, Thomas D. Snyder, National Center for Education Statistics, U.S. Department of Education, Table 72).

[19] See Characteristics of Women Postsecondary Students, Susan Hill, et. al.,

(National Center for Education Statistics, U.S. Departmnet of Education, Nov., 1981) for socio-economic characteristics of women students.

20 In 1985, 31.4 % of Hispanics and 15.5% of Blacks aged 14-34 were classified as high school drop-outs, as compared to 11.5% of Whites (Digest of Education Statistics, 1987, National Center for Education Statistics, U.S. Dept. of Education, Table 72). The "High School and Beyond" study tracked 1980 high school sophomores and found that one-third of drop-outs returned to complete high school/GED within two years of their expected graduation, but fewer Hispanics (30%) and Blacks (33%) returned than Whites (41%) (The Condition of Education, 1987, Joyce D. Stern, ed., and Marjorie O. Chandler, assoc. ed., National Center for Education Statistics, U.S. Dept. of Education, p.28). But many minority drop-outs do return to complete high school at older ages; Table 4 of this report shows greater proportions of minorities than non-minorities, ages 20-39, enrolled in high school completion programs. For state trends see High School Graduates: Projections by State, 1986 to 2004, Western Interstate Commission on Higher Education, Teachers Insurance and Annuity Association and the College Board (Boulder, CO: WICHE publ. #2A178, March, 1988).

21 Educational and other attributes of minority populations are detailed in: "America's Black Population: 1970-1982", W.C. Matney and D.L. Johnson (Census Bureau, PIO/POP-83-1); "The Hispanic Population in the U.S., March 1986 and 1987--Advance Report" (Census Bureau, P-20, No. 416); From Minority to Majority (1987) and Shaping the Future of the Southwest (1987), Boulder, CO: Western Interstate Commission on Higher Education, publ. nos. 2A170 and 2A172, respectively. A 1984 paper by Steve Katsinas, "Hispanic Student and Staffing Patterns in Community Colleges" states that 45% of all full-time Hispanic college students are enrolled in U.S. community colleges (ERIC doc. ED248904).

22 The metro-, non-metro difference has been documented in many studies -- see historic overview in K. Patricia Cross, Adults As Learners (San Francisco: Jossey-Bass, 1981). For non-metro educational participation see Roger S. McCannon, "A Demographic Portrait and Motivations of Rural Adult Learners", Population Analyses for Colorado Educators (Vol. 3, No. 1, Winter 1985-86), U.S. Fund for the Improvement of Postsecondary Education and Colorado Commission on Higher Education, Denver.

23 In 1980 unemployed people in Colorado had highest school enrollment rates, those "out of the labor force" lowest, with the employed falling somewhere inbetween; from Demographic Insights for Education Planners: Selected Analysis of Census Data on the Colorado Population, Sheila Knop and Randal Nelsen (Population Dynamics Project, U.S. Fund for the Improvement of Postsecondary Education and Colorado Commission on Higher Education, Denver, Aug., 1985).

24 Note that poverty status was not calculated for the nearly 2 million students living in college dormitories in 1980 (who presumably are mostly young, enrolled full-time and dependent on parents). Even if all these students were to fall in the "not poverty" group, enrollment rates would still be higher for the "in/near poverty" group.

25 For an historic summary of such studies, see K. Patricia Pat Cross, Adults As Learners, San Francisco: Jossey-Bass, 1981).

[26] See "Patterns of Poverty in Colorado: Implications for Analysis and Action", Ed and Sheila Knop (Colorado State Experiment Station and Colorado Commission on Higher Education, January, 1986, ERIC doc. ED281684).

[27] During the 1960s and '70s, the "sun belt" states received many newcomers, especially young adults from baby boom cohorts, and, to a lesser extent, retired citizens. With a slowing of the economy and so many people entering middle-age, net figures show that migration stalled in the early '80s. There may be another surge in interstate migration when BB cohorts reach retirement; their destination is open to speculation, but some states could lose retiring cohorts, while others gain. Such net migration figures mask true population mobility: effects of "turnover" migration (i.e., replacement of out-migrants with in-migrants often with little net change) can quickly alter the composition of a community and have significant implications for local schools and colleges. See Ed Knop and Tad Bacigalupi, "Local Implications of Net and Turnover Migration" in Population Analyses for Colorado Educators (Vol. 2, No. 1/Winter 1985), U.S. Fund for the Improvement of Postsecondary Education and Colorado Commission on Higher Education, Denver. A Census Bureau Current Population Survey tracks mobility annually and changes are documented for intercensal periods; see "Geographical Mobility: 1985" (Census Bureau, P-20, No. 420, Dec., 1987).

[28] Note that as the "recurrent" education and "catch-up" and "saturation" themes are being interwoven here with people's concrete life circumstances they reinforce the proposition of Aslanian and Brickell that changes in life circumstances are "triggers" for adult learning. See Carol B. Aslanian and Henry M. Brickell, Americans in Transition: Life Changes As Reasons for Adult Learning, NY: College Entrance Examination Board, 1980.

[29] See The Condition of Education, 1987, Joyce D. Stern (ed.) and Marjorie O. Chandler (assoc. ed.), National Center for Education Statistics, U.S. Dept. of Education.

[30] See earlier demographic sources and Robert E. Kennedy, Life Choices, NY: Holt, Rinehart and Winston, 1986; Susan Littwin, The Postponed Generation: Why American Youth Are Growing Up Later, NY: William Morrow and Co., 1986; Landon Y. Jones, Great Expectations: America and the Baby Boom Generation, NY: Bantam, 1981; Jane Newitt, Future Trends in Education Policy, Lexington, MA: Lexington Books, 1980); David Riesman, The Academic Revolution (with Jencks, Garden City, NY: Doubleday, 1968).

[31] Rapidly rising tuition is a "discouraging indicator" in the overall condition of U.S. education (Curtis O. Baker, ed., and Gayle Thompson Rogers, assoc. ed., The Condition of Education 1989: Vol. 2, Postsecondary Education, National Center for Education Statistics, U.S. Dept. of Education.

[32] Other labor force issues and prospects are in S. Knop, Approaching a New Millenium: The Environmental Context and Planning Considerations for Colorado Postsecondary Education, pp. 1-3, 6-7, 11-14 (prepared for the Colorado Commission on Higher Education, Feb., 1987; ERIC doc. ED284466).

[33] See introduction to Digest of Education Statistics, 1987 (National Center for Education Statistics, U.S. Dept. of Education); and William F. Brazziel,

"Forecasting Older Student Enrollment", Journal of Higher Education, Vol. 58, No. 2, March/April 1987.

[34] More detailed enrollment projections were not undertaken because there is not a published population projections set that accomodates the minority status and age-cohort definitions used here.

[35] Curtis O. Baker (ed.) and Gayle Thompson Rogers (assoc. ed.), The Condition of Education 1989: Vol. 2, Postsecondary Education, National Center for Education Statistics, U.S. Dept. of Education.

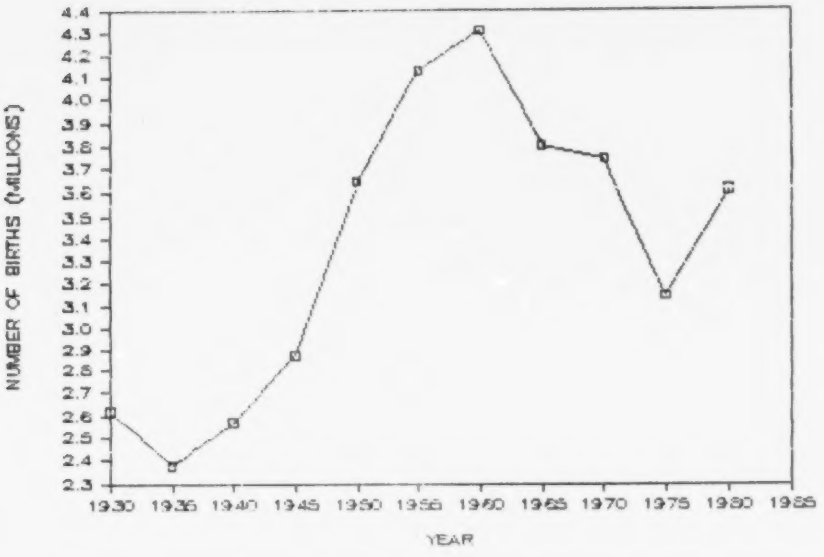
[36] Debra E. Gerald, et. al., Projections of Educational Statistics to 1997-98, National Center for Education Statistics, U.S. Dept. of Education, Sept., 1988. In 1980 the discrepancy between Census and NCES enrollment estimates was 180,000 students with Census Spring enrollment about 1.5% higher than NCES Fall enrollment. Also, both Census and NCES sources may under-estimate annual student headcount (see note 15).

[37] NCES projections extend through 1997 with "middle alternative" enrollment projections for that year showing about 12.2 million postsecondary students and "high alternative" projections showing about 12.9 million. Another study of enrollment demand and faculty supply reaches to the year 2012 (William G. Bowen and Julie Ann Sosa, Prospects for Faculty in the Arts and Sciences: A Study of Factors Affecting Demand and Supply, 1987 - 2012, forthcoming, Princeton University Press). Preliminary releases of its findings suggest that considerable enrollment growth can be expected beginning in 1997, which will result in serious faculty shortages -- especially in the humanities and social sciences (E.B. Fisher, "Shortage Seen for Faculties for the 1990s", New York Times EDUCATION, Wed., Sept. 13, 1989).

[38] NCES enrollment counts and projections also show greater change in composition of the student population than in overall numbers.

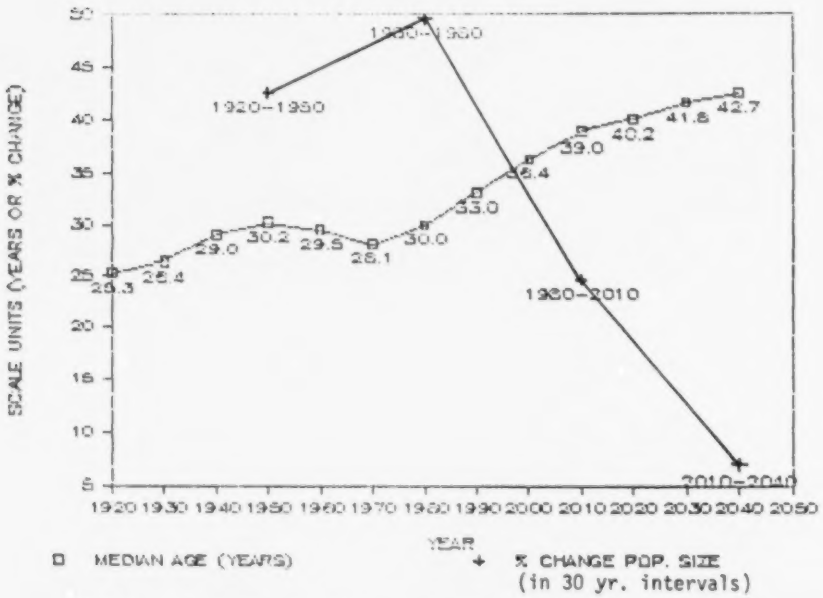
TEXT TABLES AND FIGURES

Figure 1. U.S. Births, 1930 - 1980, in Millions.



SOURCE: Census Bureau, Current Population Reports, #704 & #1006.

Figure 2. Historic and Projected Change in U.S. Population Size and Median Age, 1920 - 2040.



SOURCE: Census Bureau (see source note, text Table 1A)

Table 1A. Tracking the Baby Boom: Historic and Projected Age Distribution of the U.S. Population, 1920-2040, in Percents.[1,2]

Birth Cohort	Year[2]	% in Age Category 0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	Total (n, millions)	Median Age (in years)
	2040	11	12	12	12	12	13	11	17	100% (301.8)	42.7
	2030	11	12	12	13	13	12	12	16	100% (300.6)	41.8
	2020	12	12	13	13	12	13	13	12	100% (294.4)	40.2
	2010	12	13	14	13	14	15	10	10	100% (282.6)	39.0
	2000	13	14	13	15	16	11	8	9	100% (268.3)	36.4
	1990	15	14	16	17	13	9	8	9	100% (250.4)	33.0
Post-Baby Boom	1980	15	17	18	14	10	10	8	7	100% (226.5)	30.0
	1970	18	20	15	11	12	10	8	6	100% (203.2)	28.1
Late Baby Boom	1960	22	17	12	14	13	10	7	6	100% (179.3)	29.5
Early Baby Boom	1950	20	14	16	15	13	10	7	5	100% (151.3)	30.2
Pre-Baby Boom	1940	16	18	17	15	13	10	6	4	100% (132.2)	29.0
	1930	20	19	17	15	12	9	5	3	100% (123.2)	26.4
	1920	22	19	17	15	11	8	5	3	100% (106.0)	25.3

[1] Percents rounded to nearest whole; any difference between row sum and 100% due to rounding error.

[2] Historic population counts are from decennial censuses and are for April 1st of each decennial year; projected numbers are for July 1 of future decennial years.

SOURCE: Census Bureau. 1920-1980 data are from U.S. Chapter B, 1980, General Population Characteristics, Table 45. Age-specific population projections for 1990-2040 are from Current Population Reports, Series P-25, No. 1018, Projections of the Population of the U.S. by Age, Sex, and Race: 1988 to 2080, Table 4, middle series 14 projections.

Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

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Table 1B. Tracking the Baby Boom: Changes in the U.S. Age Distribution and Size of Age Categories for 30 Year Intervals, 1920-2040, in Percents and Numbers (in thousands).[1]

Year/Birth Cohort	% in Age Category 0-9	10-19	20-29	30-39	40-49	50+	Total
2040, Future	10.9	11.6	12.2	12.2	12.4	40.8	100%
(n, x 1000)	(32,768)	(34,899)	(36,724)	(36,806)	(37,484)	(123,206)	(301,887)
2010, Future	12.0	12.9	13.7	12.9	14.4	34.2	100%
(n, x 1000)	(33,839)	(36,509)	(38,763)	(36,383)	(40,643)	(96,517)	(282,575)
1980, Post-Baby Boom	14.6	17.4	18.0	14.0	10.1	26.0	100%
(n, x 1000)	(33,048)	(39,410)	(40,840)	(31,526)	(22,759)	(58,962)	(226,546)
1950, Early Baby Boom	19.5	14.5	15.7	15.1	12.8	22.4	100%
(n, x 1000)	(29,505)	(21,839)	(23,855)	(22,867)	(19,342)	(33,917)	(151,326)
1920, Pre-Baby Boom	21.8	19.0	17.4	15.0	11.5	15.3	100%
(n, x 1000)	(23,851)	(20,122)	(18,418)	(15,896)	(12,151)	(16,235)	(106,822)[2]
Change[3]							
Pre-Baby Boom to Early Baby Boom, 1920-1950:							
(A) Chg. of % Per Category	-2.3	-4.5	-1.7	+ .1	+1.3	+7.1	—
(B) % Chg. of % of Tot. Pop.	-10.6	-23.7	-9.8	+ .7	+11.3	+46.4	—
(C) % Chg., Number Per Cat.	+28.8	+8.5	+29.5	+43.8	+59.2	+108.9	+42.7
Early Baby Boom to Post Baby Boom, 1950-1980:							
(A) Chg. of % Per Category	-4.9	+2.9	+2.3	-1.1	-2.7	+3.6	—
(B) % Chg. of % of Tot. Pop.	-25.1	+20.8	+14.6	-7.3	-21.1	+16.1	—
(C) % Chg., Number Per Cat.	+12.0	+80.5	+71.2	+37.9	+17.7	+73.8	+49.7
Post Baby Boom to Future, 1980-2010:							
(A) Chg. of % Per Category	-2.6	-4.5	-4.3	-1.1	+4.3	+8.2	—
(B) % Chg. of % of Tot. Pop.	-17.8	-25.9	-23.9	-7.9	+42.6	+31.5	—
(C) % Chg., Number Per Cat.	+2.4	-7.4	-5.1	+15.2	+78.6	+63.7	+24.7
Future, 2010-2040:							
(A) Chg. of % Per Category	-1.1	-1.3	-1.5	-.7	-2.0	+6.6	—
(B) % Chg. of % of Tot. Pop.	-9.2	-10.1	-10.9	-5.4	-13.9	+19.3	—
(C) % Chg., Number Per Cat.	-3.2	-4.4	-5.3	+1.4	-8.0	+27.7	+6.8

[1] Historic population counts are from decennial censuses and are for April 1st of each decennial year; projected numbers are for July 1 of future decennial years.

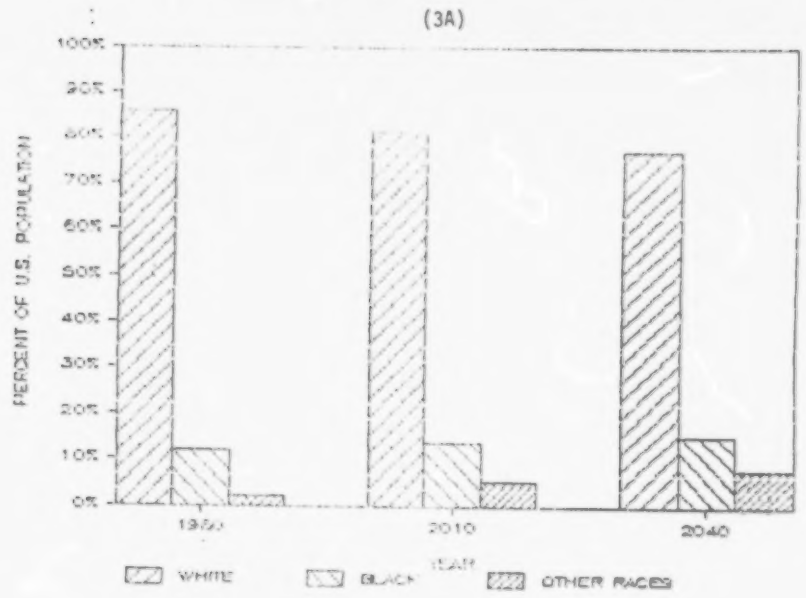
[2] 1920 population total includes approximately 150,000 persons for whom age was not reported.

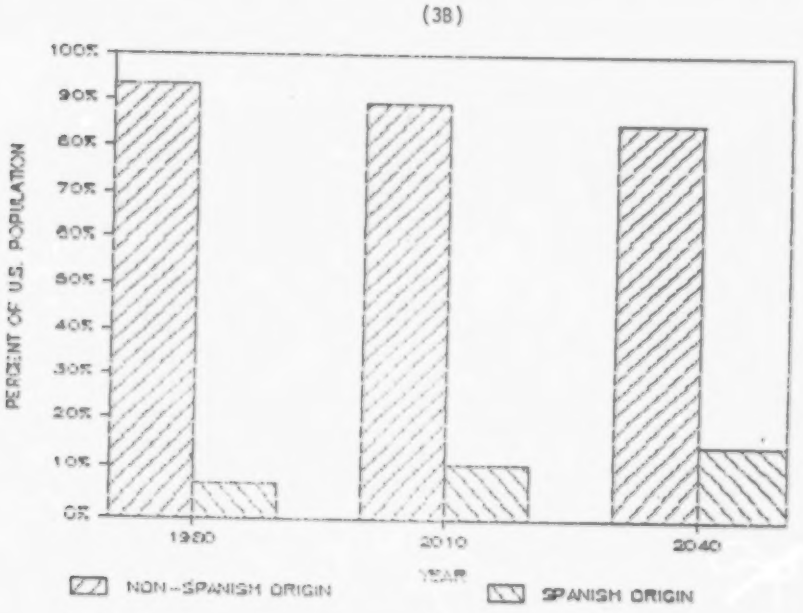
[3] Change calculations: (A) Rate, T_2(later year) - Rate, T_1 (earlier, base year); (B) (% in category T2 - % in category T1)/(% in category T1) x 100. Where T2 = later year, T1 = earlier (base) year and interpretation is % increase (or decrease) since the base year. (C) same as (B), using numbers per category in calculations.

SOURCE: Census Bureau. 1920-1980 data are from U.S. Chapter B, 1980, General Population Characteristics, Table 45. Age-specific population projections for 1990-2040 are from Current Population Reports, Series P-25, No. 1018, Projections of the Population of the U.S. by Age, Sex, and Race: 1988 to 2080, Table 4, middle series 14 projections.

Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

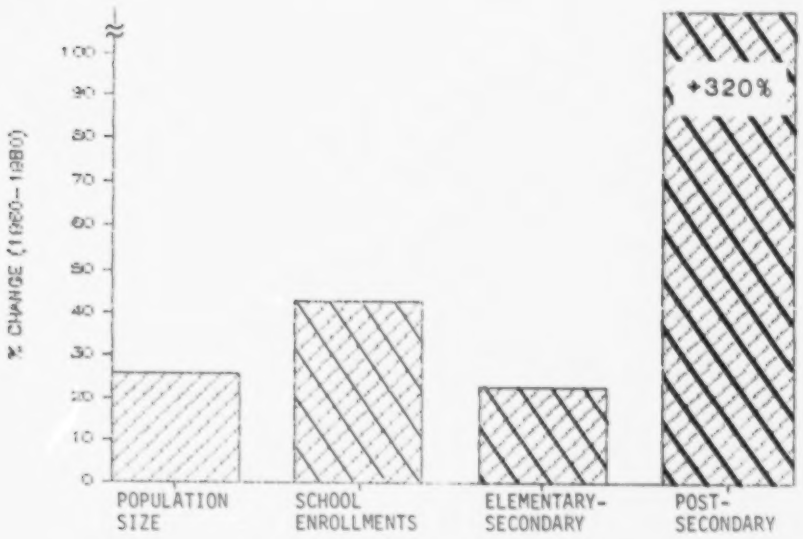
Figure 3A-B. Projected Composition of the U.S. Population by Race (3A) and Spanish-Origin (3B), 1980 - 2040.





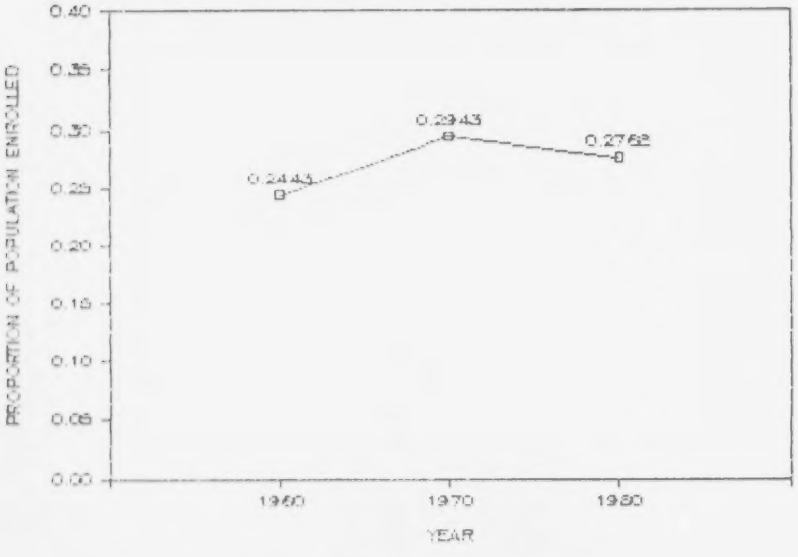
SOURCE: Census Bureau, Current Population Reports, Series P-25, #1018 (Fig. 3A) and #995 (Fig. 3B).

Figure 4. Change in U.S. Population Size and School Enrollments, 1960 - 1980.



SOURCE: Census Bureau 1% Public Use Microdata Samples for 1960 and 1980 decennial censuses.

Figure 5. As the Baby Boom Ages: Overall U.S. School Enrollment Rates, 1960 - 1980.



SOURCE: Census Bureau Public Use Microdata Samples for 1960, 1970 and 1980 decennial censuses.

Table 2A. Distribution of the U.S. Population by Age and School Enrollment Status in Percents, Numbers (in thousands) and Change, 1960-1980.

Year	Age Category (20	20-29	30-39	40-49	50+	Total (row n)
1980:						
Enrolled	83.8	11.0	3.1	1.1	1.0	100%
(n, x 1000)	(52,575)	(6,928)	(1,920)	(717)	(610)	(62,750)
Not Enrolled	12.4	20.4	18.1	13.4	35.6	100%
(n, x 1000)	(20,409)	(33,521)	(29,714)	(22,006)	(58,332)	(163,750)
% of Total Pop.	32.2	17.8	14.0	10.0	26.0	100%
(n, age cat.)	(72,984)	(40,449)	(31,634)	(22,723)	(58,942)	(226,732)
1970:						
Enrolled	90.4	7.4	1.2	.4	.6	100%
(n, x 1000)	(53,978)	(4,431)	(726)	(265)	(336)	(59,736)
Not Enrolled	16.4	17.4	15.2	16.6	34.5	100%
(n, x 1000)	(23,435)	(24,894)	(21,770)	(23,735)	(49,407)	(143,240)
% of Total Pop.	38.1	14.4	11.1	11.8	24.5	100%
(n, age cat.)	(77,413)	(29,326)	(22,495)	(24,000)	(49,742)	(202,976)
1960:						
Enrolled	94.0	5.1	.9	—	—	100%
(n, x 1000)	(41,339)	(2,248)	(389)	(1)	(1)	(43,978)
Not Enrolled	20.8	14.3	17.7	16.6	30.6	100%
(n, x 1000)	(28,309)	(19,477)	(24,091)	(22,545)	(41,589)	(136,010)
% of Total Pop.	38.7	12.1	13.6	12.5	23.1	100%
(n, age cat.)	(69,648)	(21,725)	(24,480)	(22,546)	(41,590)	(179,989)
Change[1]						
(A) Chg. of Enrolled %:						
1960-1980	[-10.2]	5.9	2.2	1.1	1.0	—
1970-1980	[- 6.6]	3.6	1.9	.7	.4	—
1960-1970	[- 3.6]	2.3	.3	.4	.6	—
(B) % Chg., % Enrolled:						
1960-1980	[-10.9]	115.7	244.4	—	—	—
1970-1980	[- 7.3]	48.6	158.3	175.0	66.7	—
1960-1970	[- 3.8]	45.1	33.3	—	—	—
(C) % Chg, Numbers Enrolled						
1960-1980	27.2	208.2	393.6	)1000.0	)1000.0	42.7
1970-1980	[-2.6]	56.3	164.5	170.6	81.7	5.0
1960-1970	30.6	97.1	86.4	)1000.0	)1000.0	35.8
(D) % Chg, Age Cat. Numbers:						
1960-1980	4.8	86.2	29.2	.8	41.7	26.0
1970-1980	[-5.7]	37.9	40.6	[-5.3]	18.5	11.7
1960-1970	11.1	35.0	[-8.1]	6.4	19.6	12.8

[1] Change calculations: (A) Rate, T2 (later year) - Rate, T1 (earlier, base year); (B) (% in category T2 - % in category T1)/ (% in category T1) x 100. Where T2 = later year, T1 = earlier (base) year and interpretation is % increase (or decrease) since the base year; (C), (D) same as (B) using numbers per (C) enrolled or (D) age category in calculations.

SOURCE: Census Bureau One-Percent Pubic Use Microdata (PUMs) for the 1960, 1970 and 1980 censuses. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table 2B. Age-Specific Enrollment Rates, by Educational Attainment of the U.S. Population, 1960-1980 (n's in thousands).[1]

School Completed	Enrollment Rates per Age Category					Totals		
	<20	20-29	30-39	40-49	50+	Rate	n_i enrolled	n_i population
Overall Rates:								
1980	.7204	.1713	.0607	.0316	.0103	.2768	62,750	226,732
1970	.6973	.1511	.0323	.0110	.0067	.2943	59,736	202,976
1960	.5935	.1035	.0159	.0000	.0000	.2443	43,978	179,989
< 12 Years:								
1980	.7389	.0407	.0178	.0094	.0050	.4361	58,474	115,741
1970	.7075	.0330	.0145	.0081	.0075	.4068	52,358	128,712
1960	.6020	.0692	.0153	.0001	.0000	.3168	41,053	129,592
12 Yrs. (H.S.):[2]								
1980	.4129	.0564	.0243	.0128	.0051	.0551	3,271	59,405
1970	.4472	.0407	.0116	.0040	.0019	.0494	2,175	44,006
1960	.2979	.0219	.0030	.0000	.0000	.0278	861	30,947
< 4 Yrs. College:[3]								
1980	.8357	.4100	.1343	.0968	.0385	.2407	6,786	28,198
1970	.8098	.4468	.0986	.0287	.0120	.2404	4,124	17,155
1960	.7587	.3654	.0429	.0001	.0000	.1491	1,670	11,203
4+ Yrs. College:[4]								
1980	.1818	.1980	.0984	.0552	.0214	.0949	2,220	23,388
1970	.0435	.2077	.0741	.0267	.0089	.0824	1,079	13,103
1960	.2689	.1683	.0346	.0000	.0000	.0479	395	8,248

[1] Persons are counted as "enrolled" if they attended regular school or college during spring of the decennial year — schooling which leads to a diploma or degree. In 1970 and 1980, nursery school enrollments were counted; in 1960, Kindergarten was the lowest level of school enrollment.

2 - 4 Schooling categories are mutually exclusive, with persons who have completed 12 years of school and are enrolled considered to be in their first year of college/postsecondary school; those with fewer than 4 years of college and enrolled are in their second, third or fourth year of postsecondary; those with 4+ years of college and enrolled are in their fifth year of postsecondary education, or beyond (see definitions, Appendix A).

SOURCE: Census Bureau One-Percent Public Use Microdata Samples (PUMs) for the 1960, 1970 and 1980 censuses. The PUMs data tapes were accessed and processed at the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Madison. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table 3A. Educational Attainment of the U.S. Population Age 25 and Older by Gender, 1960-1980 (in percents).

	School Completed						
	Elementary-Secondary		Postsecondary				
	Less Than 12 Years	12 Years (H.S.)	Less Than 4 Years	4 or More Yrs.	Total (n, x1000)	% H.S. Grads.	Median: Years of School Completed
1980:							
Total Population	33.5	34.6	15.7	16.2	100% (132,836)	66.5	12.5
Males	32.7	31.1	16.1	20.1	100% (62,416)	67.3	12.6
Females	34.2	37.7	15.3	12.8	100% (70,419)	65.8	12.4
1970:							
Total Population	47.7	31.1	10.6	10.7	100% (109,899)	52.3	12.1
Males	48.1	27.7	10.7	13.5	100% (51,870)	51.9	12.1
Females	47.2	34.1	10.6	8.1	100% (58,030)	52.8	12.1
1960:							
Total Population	58.9	24.6	8.8	7.7	100% (99,438)	41.1	10.5
Males	60.5	21.2	8.6	9.7	100% (47,931)	39.5	10.3
Females	57.5	27.8	9.0	5.8	100% (51,508)	42.5	10.7

SOURCE: Census Bureau, U.S. Chapter C, 1980: General Social and Economic Characteristics, Table 83. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

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Table 38. Age-Specific Enrollment Rates for Males and Females by Educational Attainment, U.S. Population, 1960-1980 (n's in thousands).[1]

School Completed	Enrollment Rates per Age Category					Totals (all ages)		
	<20	20-29	30-39	40-49	50+	Rate	n_1 enrolled	n_2 population
Overall Rates (all educ. levels):								
1980								
male	.720	.182	.058	.027	.009	.290	31,870	109,909
female	.721	.160	.063	.036	.011	.264	30,881	116,823
1970								
male	.700	.195	.040	.010	.006	.314	30,964	98,586
female	.694	.110	.025	.012	.007	.275	28,771	104,471
1960								
male	.597	.143	.020	.000	.000	.258	22,775	88,414
female	.590	.065	.012	.000	.000	.232	21,204	91,575
< 12 Years:								
1980								
male	.737	.041	.014	.008	.004	.453	25,805	57,022
female	.741	.040	.021	.011	.006	.420	24,669	58,719
1970								
male	.707	.039	.016	.008	.007	.418	26,664	63,778
female	.708	.027	.013	.008	.008	.396	25,693	64,934
1960								
male	.603	.081	.016	.000	.000	.322	20,898	64,987
female	.601	.057	.015	.000	.000	.312	20,155	64,605
12 Yrs. (H.S.):[2]								
1980								
male	.483	.059	.018	.009	.004	.057	1,487	25,987
female	.422	.054	.029	.016	.006	.053	1,784	33,418
1970								
male	.506	.060	.014	.004	.002	.064	1,199	18,749
female	.396	.026	.010	.004	.002	.039	977	25,257
1960								
male	.349	.037	.004	.000	.000	.038	489	13,024
female	.257	.010	.002	.000	.000	.021	372	17,923

(table continued)

Table 3B, continued

School Completed	Enrollment Rates per Age Category					Totals (all ages)		
	<20	20-29	30-39	40-49	50+	Rate	n_i enrolled	n_i population
(4 Yrs. College:[3]								
1980								
male	.856	.434	.124	.083	.036	.248	3,358	13,531
female	.821	.387	.144	.110	.040	.234	3,428	14,667
1970								
male	.834	.518	.113	.025	.011	.285	2,366	8,294
female	.787	.370	.084	.032	.013	.198	1,758	8,861
1960								
male	.881	.460	.057	.000	.000	.196	1,060	5,421
female	.719	.257	.029	.000	.000	.105	610	5,781
4+ Yrs. College:[4]								
1980								
male	.200	.221	.084	.040	.017	.091	1,220	13,370
female	.167	.173	.100	.081	.027	.100	1,800	18,018
1970								
male	.077	.265	.081	.021	.007	.096	736	7,685
female	.000	.136	.062	.038	.011	.063	344	5,419
1960								
male	.462	.228	.043	.000	.000	.066	328	4,982
female	.000	.074	.018	.000	.000	.021	68	3,266

[1] Enrollment rates rounded to nearest thousandths; they are calculated from unrounded numbers. Persons are counted as "enrolled" if they attended regular school or college during spring of the decennial year — schooling which leads to a diploma or degree. In 1970 and 1980, nursery school enrollments were counted; in 1960, Kindergarten was the lowest level of school enrollment.

[2 - 4] Schooling categories are mutually exclusive, with persons who have completed 12 years of school and are enrolled considered to be in their first year of college/postsecondary school; those with fewer than 4 years of college and enrolled are in their second, third or fourth year of postsecondary; those with 4+ years of college and enrolled are in their fifth year of postsecondary (or beyond) (see definitions, Appendix A).

SOURCE: Census Bureau 1% Public Use Microdata Samples (PUMs) for the 1960, '70 and '80 censuses. PUMs data tapes were accessed and processed at the Applied Population Laboratory, Dept. of Rural Sociology, University of Wisconsin-Madison. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table 4. Age-Specific Enrollment Rates by Minority Status and Educational Attainment, U.S. Population, 1960-1980 (n's in thousands).[1,2]

School Completed	Enrollment Rates per Age Category					Totals (all ages)		
	<20	20-29	30-39	40-49	50+	Rate	n, enrolled	n, population
Overall Rates (all educ. levels):								
1980								
Minority	.783	.167	.073	.041	.016	.337	15,604	46,236
Not Min.	.726	.173	.058	.029	.010	.261	47,147	180,496
1970								
Minority	.669	.110	.034	.015	.011	.336	9,933	29,573
Not Min.	.704	.158	.032	.010	.006	.287	49,883	173,483
1960								
Minority	.551	.082	.018	.000	.000	.269	6,516	24,182
Not Min.	.602	.107	.016	.000	.000	.240	37,462	155,807
< 12 Years:								
1980								
Minority	.716	.053	.024	.016	.008	.433	13,139	30,320
Not Min.	.747	.033	.014	.007	.004	.437	37,334	85,421
1970								
Minority	.678	.041	.020	.013	.011	.398	9,231	23,191
Not Min.	.714	.030	.013	.007	.007	.409	43,127	105,521
1960								
Minority	.556	.067	.016	.000	.000	.301	6,300	20,915
Not Min.	.611	.070	.015	.000	.000	.320	34,752	108,677
12 Yrs. (H.S.):[3]								
1980								
Minority	.409	.078	.036	.020	.013	.082	728	8,869
Not Min.	.414	.051	.022	.012	.004	.050	2,543	50,536
1970								
Minority	.346	.045	.016	.006	.005	.056	238	4,248
Not Min.	.461	.040	.011	.004	.002	.049	1,938	39,757
1960								
Minority	.241	.024	.004	.000	.000	.031	68	2,184
Not Min.	.303	.022	.003	.000	.000	.028	793	28,763

(table continued)

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Table 4, cont.

School Completed	Enrollment Rates per Age Category: <20	20-29	30-39	40-49	50+	Totals (all ages): Rate	n_1 enrolled	n_1 population
< 4 Yrs. College:[4]								
1980								
Minority	.798	.420	.191	.154	.084	.309	1,376	4,453
Not Min.	.844	.488	.122	.086	.034	.228	5,410	23,745
1970								
Minority	.766	.436	.134	.044	.019	.283	384	1,358
Not Min.	.814	.448	.095	.027	.012	.237	3,739	15,797
1960								
Minority	.694	.337	.062	.000	.000	.188	120	669
Not Min.	.763	.368	.041	.000	.000	.147	1,550	10,534
4+ Yrs. College:[5]								
1980								
Minority	.333	.237	.128	.084	.047	.139	360	2,595
Not Min.	.125	.192	.085	.051	.019	.089	1,860	20,793
1970								
Minority	.000	.215	.096	.034	.022	.103	80	776
Not Min.	.053	.207	.072	.026	.008	.081	999	12,327
1960								
Minority	.333	.187	.043	.000	.000	.067	28	414
Not Min.	.250	.167	.034	.000	.000	.047	368	7,833

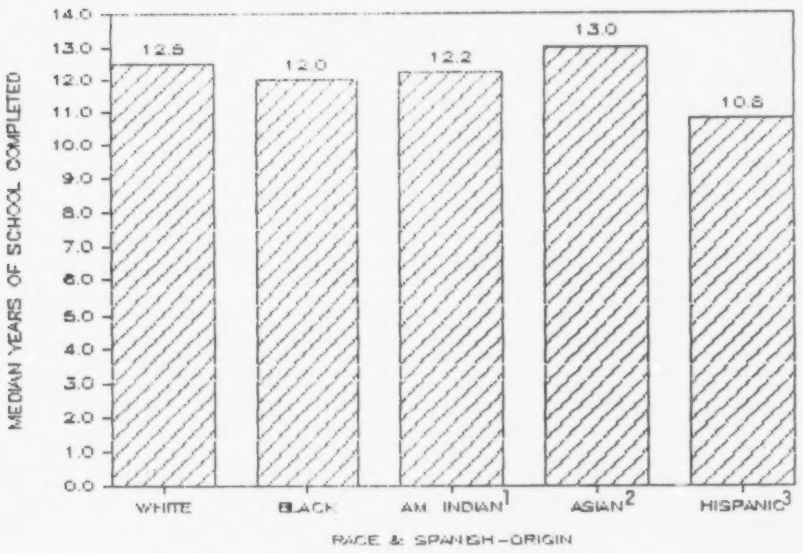
[1] Enrollment rates rounded to nearest thousandths; they are calculated from unrounded numbers. Persons are counted as "enrolled" if they attended regular school or college during spring of the decennial year — schooling which leads to a diploma or degree. In 1970 and 1980, nursery school enrollments were counted; in 1960, Kindergarten was the lowest level of school enrollment.

[2] Minorities are defined here to include hispanic people and people of races other than the white race. See text for notes on comparability of data on hispanics, 1960-1980 and interpretation precautions.

[3 - 5] Schooling categories are mutually exclusive, with persons who have completed 12 years of school and are enrolled considered to be in their first year of college/postsecondary school; those with fewer than 4 years of college and enrolled are in their second, third or fourth year of postsecondary; those with 4+ years of college and enrolled are in their fifth year of postsecondary education, or beyond (see definitions, Appendix A).

SOURCE: Census Bureau 1% Public Use Microdata Samples (PUMs) for the 1960, '70 and '80 censuses. PUMs data tapes were accessed and processed at the Applied Population Laboratory, Dept. of Rural Sociology, University of Wisconsin-Madison. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Figure 6: U.S. Population Age 25 Years and Older, 1980: Median Years of School Completed by Race and Spanish-Origin.



1. Includes Eskimos and Aluets

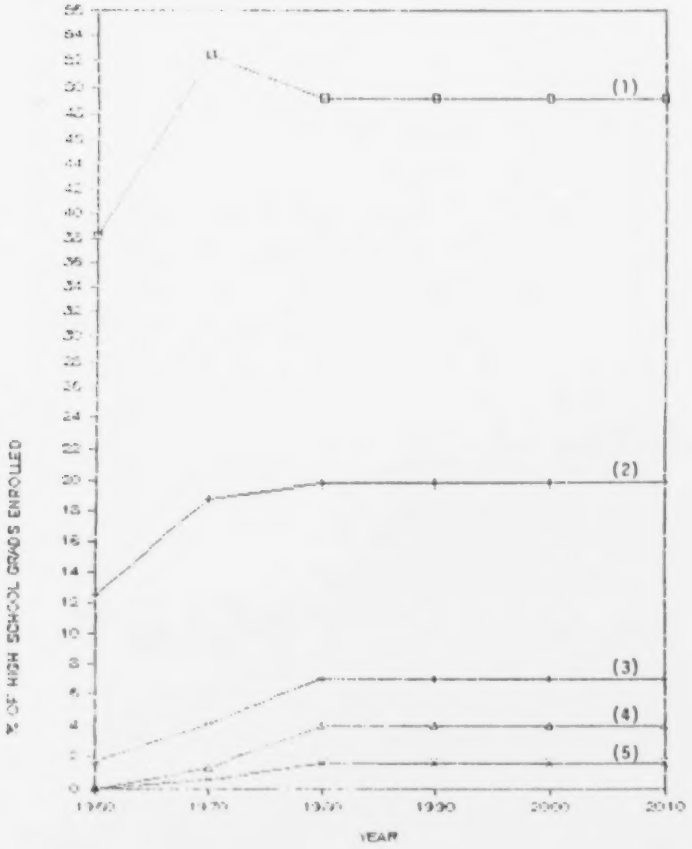
2. Includes Pacific Islanders

3. Hispanics may be of any race

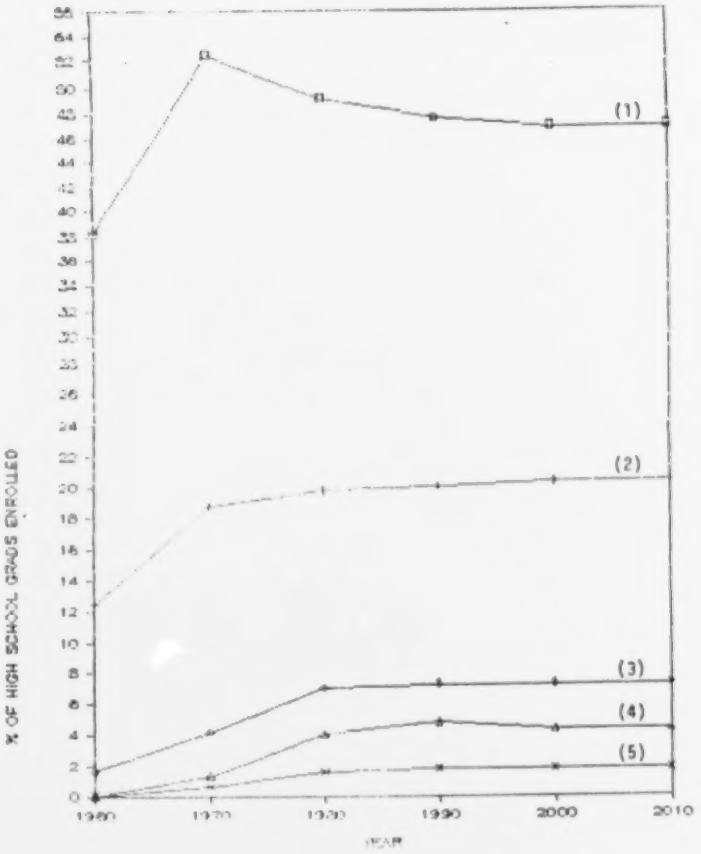
SOURCE: Census Bureau, U.S. Chapter C, 1980: General Social and Economic Characteristics, Tables 123, 133.

Figure 7(A-B). Age-Specific U.S. Postsecondary Enrollment Trends, 1960 - 2010.

7A. Scenario 1. No Age-Specific Rate Changes, 1980 - 2010.



7B. Scenario 2. Some Age-Specific Rate Changes, 1980 - 2010.



AGE: (1) under 20 (2) 20-29 (3) 30-39 (4) 40-49 (5) 50 and older

Based on data from Tables B1, 5A, 5B & 6(A-B) of this report. Figures prepared by S. Knop for the Western Interstate Commission on Higher Education and the College Board.

Figure 8. Demographic and Socio-Economic Change Factors Which Help to Explain U.S. Postsecondary Enrollment Trends, 1960 to 2010.

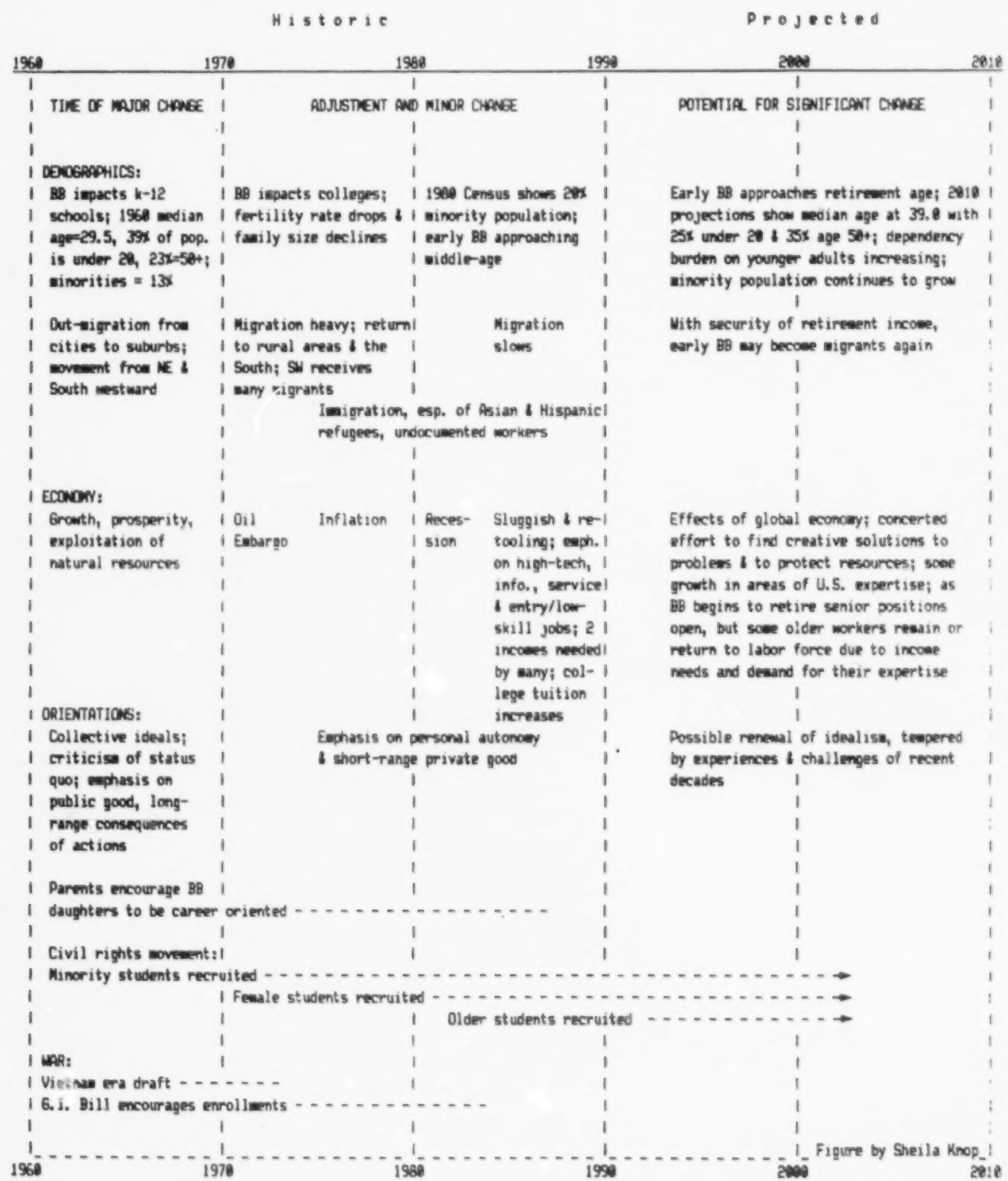

Historic
Projected
1960
1970
1980
1990
2000
2010
TIME OF MAJOR CHANGE
ADJUSTMENT AND MINOR CHANGE
POTENTIAL FOR SIGNIFICANT CHANGE
DEMOGRAPHICS:
BB impacts k-12 schools; 1960 median age=29.5, 39% of pop. is under 20, 23%=50+; minorities = 13%
BB impacts colleges; fertility rate drops & family size declines
1980 Census shows 20% minority population; early BB approaching middle-age
Early BB approaches retirement age; 2010 projections show median age at 39.0 with 25% under 20 & 35% age 50+; dependency burden on younger adults increasing; minority population continues to grow
Out-migration from cities to suburbs; movement from NE & South westward
Migration heavy; return to rural areas & the South; SW receives many migrants
Migration slows
With security of retirement income, early BB may become migrants again
Immigration, esp. of Asian & Hispanic refugees, undocumented workers
ECONOMY:
Growth, prosperity, exploitation of natural resources
Oil Embargo
Inflation
Recession
Sluggish & retooling; emph. on high-tech, info., service & entry/low-skill jobs; 2 incomes needed by many; college tuition increases
Effects of global economy; concerted effort to find creative solutions to problems & to protect resources; some growth in areas of U.S. expertise; as BB begins to retire senior positions open, but some older workers remain or return to labor force due to income needs and demand for their expertise
ORIENTATIONS:
Collective ideals; criticism of status quo; emphasis on public good, long-range consequences of actions
Emphasis on personal autonomy & short-range private good
Possible renewal of idealism, tempered by experiences & challenges of recent decades
Parents encourage BB daughters to be career oriented
Civil rights movement:
Minority students recruited
Female students recruited
Older students recruited
WAR:
Vietnam era draft
G.I. Bill encourages enrollments
Figure by Sheila Knop

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Table 5A. SCENARIO ONE, Projected Postsecondary Education Enrollment Numbers and Rates for Degree-Seeking Students, Spring 1990, 2000 and 2010: For Baby Boom and Other Age-Cohorts of U.S. High School Graduates (n's in thousands). [1,2]

Birth Cohort	Age Cohort	1988, Base Year: (n, HS grads) x (PS enrol. rate)	1988, Base Year: n, PS enroll.	Future Years, Projected: (n, H.S. graduates) x (postsecondary enrollment rate) 1990	1990	Future Years, Projected: (n, H.S. graduates) x (postsecondary enrollment rate) 2000	2000	Future Years, Projected: n, postsecondary enrollments 2010	2010
	50 Yrs.+	(29,663) (.0156)	463	(37,179) (.0156)	580	(52,488) (.0156)	818	(74,382) (.0156)	1,160
Pre-BB	40-49	(16,289) (.0403)	657	(25,830) (.0403)	1,041	(35,004) (.0403)	1,411	(33,892) (.0403)	1,366
Early BB	30-39	(25,840) (.0783)	1,817	(35,552) (.0783)	2,499	(34,384) (.0783)	2,417	(30,273) (.0783)	2,128
	20-29	(33,732) (.1973)	6,655	(33,523) (.1973)	6,614	(29,467) (.1973)	5,814	(32,324) (.1973)	6,378
Late BB									
Post BB	< 20	(5,466) (.4913)	2,686	(5,354) (.4913)	2,630	(5,493) (.4913)	2,699	(5,269) (.4913)	2,589
Overall:		(118,991) (.1106)	12,277	(137,438) (.0972)	13,364	(156,756) (.0839)	13,159	(176,140) (.0773)	13,621

[1] Source for historic data on numbers of high school graduates and postsecondary enrollments: Census Bureau 1% Public Use Microdata Samples (PUMs), 1980 decennial census.

[2] Sources for projections, 1990-2010: (A) Numbers of high school graduates in future years are from Table F2 of this report. Note that the age 50+ category represents differential graduation rates of younger and older cohorts within the 50+ category, with numbers reported here reflecting sums from the more detailed age-breaks in Table F2; (B) the SCENARIO ONE postsecondary enrollment numbers reported here are based on the assumption that 1990 - 2010 postsecondary enrollment rates for age-cohorts of degree-seeking students will be the same as those observed in 1988 (see text).

Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table 5B. SCENARIO TWO, Projected Postsecondary Education Enrollment Numbers and Rates for Degree-Seeking Students, Spring 1990, 2000 and 2010: For Baby Boom and Other Age-Cohorts of U.S. High School Graduates (n's in thousands). [1,2]

Birth Cohort	Age Cohort	1980, Base Year: (n, HS grads) x (PS enrol. rate) : n, PS enroll.	Future Years, Projected: (n, H.S. graduates) x (postsecondary enrollment rate) : n, postsecondary enrollments 1990	2000	2010
	50 Yrs.+	(29,663) (.0156) : 463	(37,179) (.0181) : 673	(52,480) (.0181) : 949	(74,382) (.0181) : 1,346
Pre-BB	40-49	(16,289) (.0403) : 657	(25,838) (.0478) : 1,235	(35,004) (.0428) : 1,498	(33,892) (.0428) : 1,451
Early BB	30-39	(25,840) (.0703) : 1,817	(35,552) (.0728) : 2,588	(34,384) (.0728) : 2,503	(30,273) (.0728) : 2,204
Late BB	20-29	(33,732) (.1973) : 6,655	(33,523) (.1998) : 6,698	(29,467) (.2023) : 5,961	(32,324) (.2023) : 6,539
Post BB	< 20	(5,466) (.4913) : 2,686	(5,354) (.4763) : 2,550	(5,493) (.4688) : 2,575	(5,269) (.4688) : 2,470
Overall:		(110,991) (.1106) : 12,277	(137,438) (.1000) : 13,744	(156,756) (.0860) : 13,486	(176,140) (.0795) : 14,010

[1] Source for historic data on numbers of high school graduates and postsecondary enrollments: Census Bureau 1% Public Use Microdata Samples (PUMs), 1980 decennial census.

[2] Sources for projections, 1990-2010: (A) Numbers of high school graduates in future years are from Table F2 of this report. Note that the age 50+ category represents differential graduation rates of younger and older cohorts within the 50+ category, with numbers reported here reflecting sums from the more detailed age-breaks in Table F2; (B) the SCENARIO TWO postsecondary enrollment numbers reported here are based on the assumption that 1990 - 2010 postsecondary enrollment rates for age-cohorts of degree-seeking students will be somewhat different than those observed in 1980 (see text).

Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table 6 (A & B). Tracking the Baby Boom: Historic and Projected Percent Distribution of Postsecondary Enrollments by Age, 1960 - 2010.

6A, SCENARIO ONE: (No Age-Specific Enrollment Rate Changes, 1980 - 2010)

Age Cohort	Percent of Total Postsecondary Enrollment					
	Historic			Projected		
	1960	1970	1980	1990	2000	2010
50 Yrs. +	—	1.4	3.8	4.3	6.2	8.5
40-49	—	2.5	5.4	7.8	10.7	10.0
30-39	7.6	8.4	14.8	18.7	18.4	15.6
20-29	57.4	57.0	54.2	49.5	44.2	46.8
(20 Yrs.	35.1	30.8	21.9	19.7	20.5	19.0
Total Enrollments:	100%	100%	100%	100%	100%	100%
(n, x 1000)	(2,926)	(7,378)	(12,277)	(13,364)	(13,159)	(13,621)

6B, SCENARIO TWO: (Some Age-Specific Enrollment Rate Changes, 1980 - 2010)

Age Cohort	Percent of Total Postsecondary Enrollment					
	Historic			Projected		
	1960	1970	1980	1990	2000	2010
50 Yrs. +	—	1.4	3.8	4.9	7.0	9.6
40-49	—	2.5	5.4	9.0	11.1	10.4
30-39	7.6	8.4	14.8	18.8	18.6	17.7
20-29	57.4	57.0	54.2	48.7	44.2	46.7
(20 Yrs.	35.1	30.8	21.9	18.6	19.1	17.6
Total Enrollments:	100%	100%	100%	100%	100%	100%
(n, x 1000)	(2,926)	(7,378)	(12,277)	(13,744)	(13,486)	(14,010)

SOURCE: Based on Census data and calculations in Tables F2, 5A & 5B of this report. Tables prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

APPENDIX A

CENSUS VARIABLE DEFINITIONS AND INTERPRETATIVE NOTES

Educational Characteristics

Data on educational characteristics come from census long-form questionnaires, where information is solicited on each household member about (1) recent school/college attendance ("enrollment"), (2) highest grade/year of school attended, and (3) whether the person finished the grade, is in it presently, or did not finish. For the April 1, 1980 census, the attendance question asked "since February 1, 1980, has this person attended regular school or college at any time?" People were instructed to count public or private "nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree" and were told to count finishing high school by equivalency test (G.E.D.) as 12 years of schooling. Questions were comparable in the two previous censuses (although nursery school was not counted as schooling prior to 1970).

Enrollment status is central to the study, with people simply classified according to whether or not they were enrolled in school. Enrollment figures do not include non-credit enrollments, and, following instructions on the questionnaire, should not include credit enrollments which students themselves view as being for non-degree purposes. Because other sources often emphasize school enrollment data for the fall term, it is worthy of another mention that decennial census enrollment figures are for the spring term.

The measure for educational attainment used here is common in other sources, i.e., "school completed". For purposes of the study, four mutually-exclusive categories of educational attainment were used: (1) fewer than 12 years of school (less than high school); (2) 12 years only (high school graduation/G.E.D. credentials); (3) less than 4 years of college; or (4) 4+ years of college. Completion of less than 4 years of college implies prior attendance in degree-oriented, undergraduate or lower-level postsecondary programs of community, junior and 4-year colleges and universities and, probably, certificated programs of vocational/technical schools, religious schools, etc. Completion of 4+ years of college is not necessarily the same as having been granted an undergraduate or higher degree, but does allow sorting of people with the highest levels of postsecondary attendance.

Many data tables report age-specific enrollment rates. At times the rates are for the entire age-cohort, regardless of educational attainment; at other times age-specific rates are cross-tabulated with educational attainment. With enrollments defined as being degree- or diploma-oriented, persons with less than 12 years schooling and enrolled are elementary-secondary students; those with 12 years schooling (high school) and enrolled are in their first year of postsecondary school; those with less than 4 years college and enrolled are in their second, third or fourth year of post-secondary; those with 4+ years of college and enrolled are in their fifth year of postsecondary (or beyond). Additional tables control for educational attainment, reporting age-specific enrollment rates for the pool of high school graduates who are eligible for postsecondary participation.

Other Time-Series Variables

The report provides age-specific schooling and enrollment data by gender

and **minority status**, 1960-1980. Minorities are defined as persons of non-White races or of Hispanic background. Blacks, American Indians, Eskimos, Aleuts, Asians and Pacific Islanders and other non-Whites are classified as minority, as are people of Spanish-origin (1980) and Spanish-surname (1970 and 1960). Non-minority persons are those who are White and not Hispanic.

Because Census Bureau counts of people of Hispanic background shifted from those with Spanish-surname to self-reports of Spanish-origin in 1980, interpretation of minority status is slightly different for 1960 and 1970 than for 1980. Also, by 1980 effects of the Civil Rights Movement (e.g., school and television emphasis on cultural roots, government affirmative action programs) provided considerable incentive to report oneself as a member of a minority group. Therefore time-series changes in minority schooling levels and enrollment rates should be considered as general indicators, not precise measures.

Additional Variables for 1980

To avoid over-generalization among minorities, the report includes 1980 data on **education characteristics of minority sub-groups, by race and Spanish-origin**. For additional insights on enrollment patterns, 1980 age-specific enrollment rates are reported by:

-- **place of residence** (metro, non-metro);
-- **employment status** (employed, not employed);
-- **poverty status** (in poverty/marginally close to poverty, not in poverty); and
-- **interstate migration status** (migrant, not migrant).

According to Census definition, metropolitan places are cities of 50,000 population or greater, with non-metropolitan places including smaller towns and more rural farm and non-farm areas.

The employment status measure is for civilians. Employed persons include part- and full-time workers. The not employed category includes youth under 16, the unemployed, and people who are not in the labor force (e.g., retired people, housewives/husbands, disenchanted workers, handicapped people).

Poverty status was selected as an income measure because it contains adjustments for cost-of-living and inflation. The income measure is for 1979, the year prior to the census. Enrollment rates are provided for (1) people with incomes below the poverty line or marginally close to poverty, i.e., to 25% above the poverty line, and (2) people not in poverty, with incomes 25% or more above the poverty line. A table footnote contains additional information about poverty status.

Because domestic migration was especially prevalent during the 1970s and has been associated with younger adults with relatively high schooling levels, a measure of mobility is used, i.e., interstate migration status. Decennial census counts of interstate migrants are for people who lived in a different state five years prior to the census, i.e., 1975. (In 1980, only one-half of the migration responses were coded. Sample data have been weighted accordingly, with age-specific enrollment rates presented for interstate migrants vs. non-migrants.)

APPENDIX B

Table B1, A-C. Age-Specific Enrollment Rates and Percent Change, 1960 to 1980, for (A) the U.S. Population, (B) High School Graduates, and (C) Persons with Fewer than 12 Years of Schooling (numbers in thousands)[1,2].

	Age Category					
A. Total Population Enrollment Rates	(20 Yrs.	20-29 Yrs.	30-39 Yrs.	40-49 Yrs.	50 Yrs.+	Total
1980	.7204	.1713	.0607	.0316	.0103	.2768
(n, enrolled)	(52,575)	(6,928)	(1,920)	(717)	(610)	(62,750)
(total n)	(72,984)	(40,449)	(31,634)	(22,723)	(58,942)	(226,732)
1970	.6973	.1511	.0323	.0110	.0067	.2943
(n, enrolled)	(53,978)	(4,431)	(726)	(265)	(336)	(59,736)
(total n)	(77,413)	(29,326)	(22,495)	(24,000)	(49,742)	(202,976)
1960	.5935	.1035	.0159	.0000	.0000	.2443
(n, enrolled)	(41,339)	(2,248)	(389)	((1)	(1)	(43,978)
(total n)	(69,648)	(21,725)	(24,480)	(22,546)	(41,590)	(179,989)
Change[3]						
(A) Chg. of Rate Per Category:						
1960-1980	.1269	.0678	.0448	.0316	.0103	.0325
1970-1980	.0231	.0202	.0284	.0206	.0036	[-.0175]
1960-1970	.1038	.0476	.0164	.0110	.0067	.0500
(B) % Chg., Enrollment Rates:						
1960-1980	21.4	65.5	281.8	—	—	13.3
1970-1980	3.3	13.4	87.9	187.3	53.7	[-5.9]
1960-1970	17.5	46.0	103.1	—	—	20.5
(C) % Chg, Enrollment Numbers:						
1960-1980	27.2	208.2	393.0	)1000.0	)1000.0	42.7
1970-1980	[-2.6]	56.3	164.6	170.8	81.7	5.0
1960-1970	30.6	97.1	86.4	)1000.0	)1000.0	35.8
B. High School Graduates[4] Enrollment Rates						
1980	.4913	.1973	.0703	.0403	.0156	.1106
(n, enrolled)	(2,686)	(6,655)	(1,817)	(657)	(463)	(12,277)
(total n)	(5,466)	(33,732)	(25,840)	(16,289)	(29,663)	(110,991)
1970	.5249	.1875	.0412	.0132	.0055	.0993
(n, enrolled)	(2,271)	(4,203)	(617)	(184)	(103)	(7,378)
(total n)	(4,326)	(22,416)	(14,990)	(13,956)	(18,576)	(74,264)
1960	.3827	.1244	.0164	.0000	.0000	.0581
(n, enrolled)	(1,026)	(1,678)	(222)	((1)	(0)	(2,926)
(total n)	(2,681)	(13,484)	(13,526)	(10,045)	(10,661)	(50,397)
Change						
(A) Chg. of Rate Per Category:						
1960-1980	.1086	.0729	.0539	.0403	.0156	.0525
1970-1980	[-.0336]	.0098	.0291	.0271	.0101	.0113
1960-1970	.1422	.0631	.0248	.0132	.0055	.0412
(B) % Chg., Enrollment Rates:						
1960-1980	28.4	58.6	328.7	—	—	90.4
1970-1980	[-6.4]	5.2	70.6	205.3	183.6	11.4
1960-1970	37.2	50.7	151.2	—	—	70.9
(C) % Chg., Enrollment Numbers:						
1960-1980	161.7	296.6	719.8	)1000.0	—	319.6
1970-1980	18.3	58.3	194.4	256.6	351.6	66.4
1960-1970	121.3	150.5	178.5	)1000.0	—	152.2

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Table B1, A-C, continued.

C. People with Less Than High School Completed Enrollment Rates	Age Category (20 Yrs.	20-29 Yrs.	30-39 Yrs.	40-49 Yrs.	50 Yrs.+	Total
1980	.7389	.0407	.0178	.0094	.0050	.4361
(n, enrolled)	(49,898)	(273)	(103)	(61)	(147)	(50,474)
(total n)	(67,517)	(6,717)	(5,794)	(6,434)	(29,279)	(115,741)
1970	.7075	.0330	.0145	.0081	.0075	.4068
(n, enrolled)	(51,787)	(228)	(109)	(81)	(233)	(52,358)
(total n)	(73,087)	(6,910)	(7,506)	(10,044)	(31,166)	(128,712)
1960	.6820	.0692	.0153	.0001	.0000	.3168
(n, enrolled)	(40,312)	(570)	(168)	((1)	(1)	(41,053)
(total n)	(66,966)	(8,241)	(10,954)	(12,501)	(30,929)	(129,592)
Change						
(A) Chg. of Rate Per Category:						
1960-1980	.1369	[-.0285]	.0025	.0093	.0050	.1193
1970-1980	.0314	.0077	.0033	.0013	[-.0025]	.0293
1960-1970	.1055	[-.0362]	[-.0008]	.0080	.0075	.0900
(B) % Chg., Enrollment Rates:						
1960-1980	22.7	[-41.2]	16.3	)1000.0	—	37.7
1970-1980	4.4	23.3	22.8	16.0	[-33.3]	7.2
1960-1970	17.5	[-52.3]	[-5.2]	)1000.0	—	28.4
(C) % Chg., Enrollment Numbers:						
1960-1980	23.8	[-52.1]	[-38.4]	)1000.0	)1000.0	22.9
1970-1980	[-3.5]	20.0	[- 4.9]	[-24.9]	[-37.1]	[-3.6]
1960-1970	28.3	[-60.0]	[-35.3]	)1000.0	)1000.0	27.5

[1] Data are from 1% samples of the 1960, 1970 and 1980 population and have been weighted to closely approximate complete counts. Because of this, numbers per age category reported here vary some from 100% counts presented in earlier tables. See narrative for a description of the samples.

[2] As defined in census questionnaires, persons are counted as "enrolled" if they attended regular school or college during spring of the decennial year—schooling which leads to a diploma or degree. In 1970 and 1980, nursery school enrollments were counted; in 1960, kindergarten was the lowest level of school enrollment.

[3] Change calculations: (A) Rate, T2 (later year) - Rate, T1 (earlier, base year); (B) (% in category T2 - % in category T1)/ (% in category T1) x 100. Where T2 = later year, T1 = earlier (base) year and interpretation is % increase (or decrease) since the base year. (C) same as (B), using numbers per category in calculations.

[4] According to the Census Bureau, persons who indicate they have completed 12 years of schooling or the GED are considered to be high school graduates.

SOURCE: Census Bureau 1% Public Use Microdata samples (PUMs) for the 1960, '70 and '80 censuses. PUMs data tapes were accessed and processed at the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Madison. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

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APPENDIX C

Table C1. Educational Attainment of the U.S. Population Age 25 and Older, 1980: By Race and by Spanish-Origin, in Percents.

	School Completed						
	Elementary/Secondary		Postsecondary				
	Less Than 12 Years	12 Years (H.S.)	Less Than 4 Years	4 or More Yrs.	Total (n, x1000)	% H.S. Grads.	Median: Years of School Completed
White	31.2	35.7	16.0	17.1	100% (114,290)	68.8	12.5
Black	48.8	29.3	13.5	8.4	100% (13,195)	51.2	12.0
Am. Indian, Eskimo, Aluet	44.5	31.3	16.5	7.7	100% (715)	55.5	12.2
Asian, Pacific Islander	25.2	24.7	17.2	32.9	100% (2,137)	74.8	13.0
Total, Persons 25 & Older, 1980[1]	33.5	34.6	15.7	16.2	100% (132,836)	66.5	12.5
Spanish-Origin[2]	56.0	24.4	12.0	7.6	100% (6,739)	44.0	10.8
Not Spanish-Origin	32.3	35.1	15.9	16.7	100% (126,096)	67.7	12.5

[1] Population total numbers exceed those of the four racial groups combined because persons of other races (or for whom no race was recorded) are included in the total.

[2] Persons of Spanish-origin may be of any race. Together, Spanish and Not Spanish categories represent the total U.S. age 25+ population.

SOURCE: Census Bureau, U.S. Chapter C, 1980: General Social and Economic Characteristics, Tables 123, 133. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table C2. Age-Specific Postsecondary Enrollment Rates of the U.S. Population, Spring, 1980, By Race and Spanish-Origin (numbers in thousands).[1]

Race and PS Enrollment Level:	Postsecondary Enrollment Rates per Age Category[2]				Totals (all ages)		
	18-19 Yrs.	20-29 Yrs.	30-39 Yrs.	40 Yrs.+	Overall Rate		Number Enrolled
White							
1st-4th Yr. College	.3171	.1359	.0350	.0090	.0601		8,310
5th+ Yr. College	.0000	.0320	.0215	.0041	.0139		1,929
(cat. n x 1000)	(7,005)	(33,274)	(26,406)	(71,602)		(138,287)	
Black							
1st-4th Yr. College	.2380	.1299	.0509	.0131	.0706		1,207
5th+ Yr. College	.0000	.0150	.0148	.0042	.0092		157
(cat. n x 1000)	(1,189)	(5,046)	(3,346)	(7,517)		(17,099)	
Am. Indian, Eskimo, Aleut							
1st-4th Yr. College	.1630	.1125	.0555	.0175	.0672		58
5th+ Yr. College	.0004	.0142	.0159	.0050	.0100		9
(cat. n x 1000)	(66)	(274)	(191)	(333)		(865)	
Asian, Pacific Islander							
1st-4th Yr. College	.4793	.2325	.0555	.0218	.1121		275
5th+ Yr. College	.0000	.0823	.0487	.0116	.0407		100
(cat. n x 1000)	(119)	(689)	(648)	(999)		(2,456)	
Spanish-Origin[3] and PS Enrollment Level:							
1st-4th Yr. College	.1965	.1099	.0398	.0129	.0642		576
5th+ Yr. College	.0000	.0170	.0141	.0044	.0104		93
(cat. n x 1000)	(654)	(2,962)	(1,983)	(3,382)		(8,981)	

[1] As defined in the decennial census questionnaire, persons are counted as "enrolled" if they attended regular school or college between the period February 1 - April 1, 1980 — schooling which leads to a diploma or degree.

[2] Rates calculated from raw Census numbers. For close approximation of numbers of enrollments per race/ethnic & age-specific enrollment category, multiply its rate x the category n x 1000.

[3] Persons of Spanish-origin may be of any race.

SOURCE: Census Bureau, U.S. Chapter D, Section A, 1980: Detailed Population Characteristics, Table 260 and U.S. Chapter B, 1980: General Population Characteristics, Table 43. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

APPENDIX D

Table D1, A-H. Summary: Age-Specific Enrollment Rates of Baby Boom Cohorts and Others, by Selected Characteristics, U.S. Population, 1980 (n's in thousands).[1]

1980 Population Characteristics	Enrollment Rates by Age and Birth Cohort					Totals (all ages)		
	Post-BB+ (20	Late BB - - 20-29	Early BB * * * * 30-39	40-49	Pre-BB - - - - - 50+	Rate	n, enrolled	n, population
A. Total Population:	.720	.171	.061	.032	.010	.277	62,750	226,732
B. School Completed:								
(12 Yrs.	.739	.041	.018	.009	.005	.436	50,474	115,741
12 Yrs. (H.S.)	.413	.056	.024	.013	.005	.055	3,271	59,485
(4 Yrs. College	.836	.410	.134	.097	.039	.241	6,786	28,198
4+ Yrs. College	.182	.198	.090	.055	021	.095	2,220	23,388
C. Gender:								
Male	.720	.182	.058	.027	.009	.290	31,870	109,909
Female	.721	.160	.063	.036	.011	.264	30,881	116,823
D. Minority Status:[2]								
Minority	.703	.167	.073	.041	.016	.337	15,604	46,236
Not Minority	.726	.173	.058	.029	.010	.261	47,147	180,496
E. Place of Residence:[3]								
Metropolitan	.729	.183	.067	.035	.012	.281	47,691	169,501
Non-Metro	.696	.131	.039	.020	.007	.263	15,060	57,231
F. Employment Status (civilians):[4]								
Employed	.601	.144	.060	.032	.014	.107	10,431	97,351
Not Employed	.736	.241	.061	.030	.008	.408	52,171	127,730
G. Poverty Status:[5]								
Poverty/Marginal	.668	.227	.061	.028	.009	.321	12,087	37,686
Not Poverty	.734	.138	.060	.032	.011	.262	48,099	183,297
H. Interstate Migration Status:[6]								
Migrant	.858	.214	.085	.048	.016	.325	7,487	24,295
Not Migrant	.890	.162	.061	.030	.010	.284	52,292	184,239

(table continued)

Table D1, A-H (cont.)

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[1] Enrollment rates calculated from unrounded numbers. Persons are counted as "enrolled" if they attended regular school or college during spring of the decennial year — schooling which leads to a diploma or degree. In 1970 and 1980, nursery school enrollments were counted; in 1960, Kindergarten was the lowest level of school enrollment.

[2] Minorities include non-Whites and Hispanics.

[3] Metropolitan places are those with 50,000+ population, non-metropolitan places have (50,000 population.

[4] "Employed" civilians worked at least 15 hours the week prior to the Census or were employed but temporarily not working for reasons of illness, vacation, etc. "Not Employed" civilians are: (A) those who do not fit the "employed" definition and were available for and looking for work during the month before the Census, and (B) those "not in the labor force" (i.e., those not working, not seeking a job or unable to work such as homemakers, retired workers, some students, persons disabled and unable to work, the disenchanted unemployed). Armed Forces people are not included here; separate analysis of the 1.65 million military personnel, of which about one-half were 20-29 years of age in 1980, show the following enrollment rates: age 20-29 = .096; 30-39 = .101; 40-49 = .068; 50-59 = .026.

[5] Poverty status is calculated for all persons except inmates of institutions, persons in military group quarters and college dorms, and unrelated individuals under age 15 in same housing unit. It is based on income during the year before the Census. The threshold of poverty varies due to factors such as size of family, number of children, age of householder, etc. As reported here, individuals are: (A) in poverty or marginally close to poverty (income less than 25% above poverty line); or (B) not in poverty (incomes 25% or more above poverty line). The 1979 poverty threshold was $7412 for a family of 4, $4876 for a 2 person household with householder under age 65, and $3479 for a 1 person HH with householder over age 65.

[6] Interstate migrants include (A) people who lived in a different U.S. state in 1975 than in 1980, along with (B) those who lived in the U.S. in 1980 and abroad in 1975. Data are for persons who were 5 years and older, 1980.

SOURCE: Census Bureau 1% Public Use Microdata Samples (PUMs) for the 1960, '70 and '80 censuses. PUMs data tapes were accessed and processed at the Applied Population Laboratory, Dept. of Rural Sociology, University of Wisconsin-Madison. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

APPENDIX E

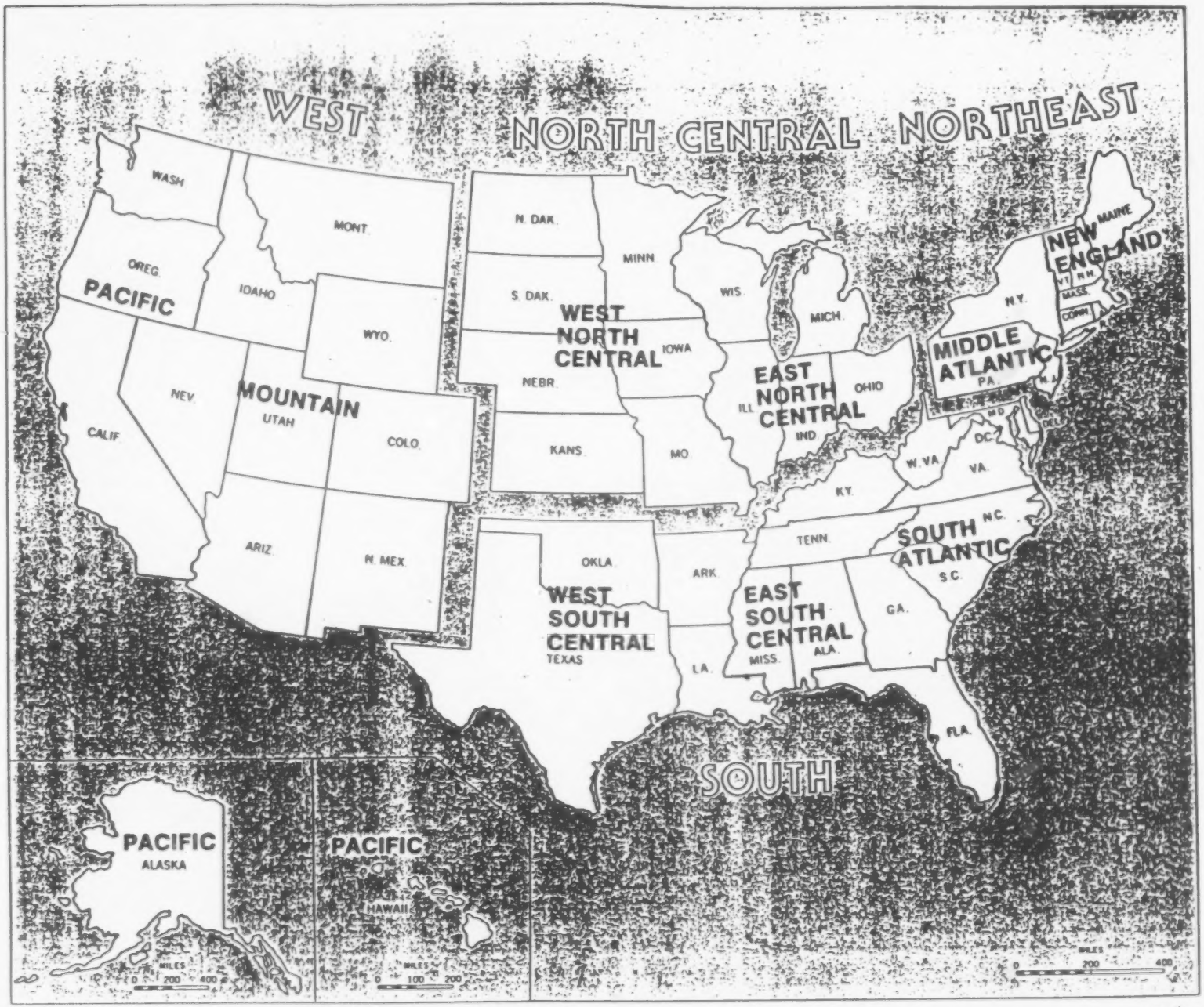

Figure E:
Regions and Census Divisions of the United States: 1980

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Table E1, A-B. Selected Characteristics of 1980 U.S. Regional Populations: Educational Attainment and Age-Specific School Enrollments (in Percents).

(A)

Region:	School Completed, Persons 25 and Older: Elementary/Secondary: Less Than 12 Years	Elementary/Secondary: 12 Years (H.S.)	Postsecondary: Less Than 4 Years	Postsecondary: 4 or More Yrs.	Total (n, age 25+ in 1000's	% H.S. Grads.	Median: Years of School Completed
Northeast	32.9	36.3	13.5	17.2	100% (29,983)	67.1	12.5
Northcentral	32.0	38.6	14.7	14.7	100% (34,085)	68.0	12.5
South	40.0	30.9	14.4	15.0	100% (43,691)	60.2	12.3
West	25.5	33.6	21.7	19.3	100% (25,157)	74.5	12.7

(B)

Region:	Percent of Age Category Enrolled in School: 14-15	16-17	18-19	20-21	22-24	25-34	% of Age 3+ Population Enrolled in College
Northeast	98.4	91.0	57.6	37.8	18.1	8.9	5.9
Northcentral	98.4	90.6	53.6	32.4	16.6	8.2	5.4
South	97.1	85.4	49.5	29.9	15.8	7.8	5.1
West	97.4	87.6	50.8	31.3	19.8	11.8	6.9

SOURCE: Census Bureau, U.S. Chapter C, 1980: Social and Economic Characteristics, Tables 81-83. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

Table E2, A-B. Selected Characteristics of 1980 U.S. Regional Populations: Age, Race and Spanish-Origin.

(A.)

Region:	Age Distribution (in Percents) Post-BB* 0-9	Late BB 10-19	Early BB* 20-29	30-39	40-49	Pre-BB* 50+	Total (n, x 1000)	Median Age (in years)
Northeast	13.0	17.3	16.9	13.8	10.3	28.7	100% (49,135)	31.8
Northcentral	14.9	17.7	18.0	13.5	9.8	26.1	100% (58,866)	29.6
South	15.0	17.6	18.0	13.9	10.0	25.6	100% (75,372)	29.7
West	15.0	16.8	19.4	15.0	10.0	23.8	100% (43,172)	29.4

(B.)

Region:	Race (in Percents) White	Black	Am. Indian, Eskimo, Aleut	Asian, Pac. Islander	Other	Total	% Spanish-Origin[1]
Northeast	86.4	9.9	.2	1.2	2.3	100%	5.3
Northcentral	88.1	9.1	.5	.7	1.6	100%	2.2
South	78.4	18.6	.5	.7	1.8	100%	5.9
West	81.5	5.2	1.8	5.0	6.5	100%	14.5

[1] Persons of Spanish-origin may be of any race.

SOURCE: Census Bureau, U.S. Chapter D, Section B, 1980: Detailed Population Characteristics, Tables 311 and 313. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

APPENDIX F

Table F1. Tracking the Baby Boom in the Short-Range Future: Projected Changes in the U.S. Age Distribution and Size of Age Categories, 1980-2010, in Percents and Numbers (in thousands).[1]

Year	Age Category: <20 Yrs.	20-29 Yrs.	30-39 Yrs.	40-49 Yrs.	50+ Yrs.	Total	Median Age (in yrs.)
2010	24.9	13.7	12.9	14.4	34.2	100%	39.0
(n, x 1000)	(70,348)	(38,763)	(36,383)	(40,643)	(96,517)	(282,575)	
2000	27.3	13.2	15.4	15.7	28.5	100%	36.4
(n, x 1000)	(73,344)	(35,336)	(41,233)	(41,976)	(76,378)	(268,266)	
1990	28.5	16.1	17.0	12.6	25.7	100%	33.0
(n, x 1000)	(71,488)	(40,200)	(42,634)	(31,624)	(64,464)	(250,410)	
1980	32.0	18.0	14.0	10.1	26.0	100%	30.0
(n, x 1000)	(72,458)	(40,840)	(31,526)	(22,759)	(58,962)	(226,546)	
Change[2]							
1980-1990:							
(A) Chg. of % Per Category	-3.5	-1.9	+3.0	+2.5	-.3	—	
(B) % Chg. of % of Tot. Pop.	-10.9	-10.6	+21.4	+24.8	-1.2	—	
(C) % Chg., Number Per Cat.	-1.3	-1.6	+35.2	+39.0	+9.3	+10.5	
1990-2000:							
(A) Chg. of % Per Category	-1.2	-2.9	-1.6	+3.1	+2.8	—	
(B) % Chg. of % of Tot. Pop.	-4.2	-18.0	-9.4	+24.6	+10.9	—	
(C) % Chg., Number Per Cat.	+2.6	-12.1	-3.3	+32.7	+18.5	+7.1	
2000-2010:							
(A) Chg. of % Per Category	-2.4	+.5	-2.5	-1.3	+5.7	—	
(B) % Chg. of % of Tot. Pop.	-8.8	+3.8	-16.2	-8.3	+20.0	—	
(C) % Chg., Number Per Cat.	-4.1	+10.0	-12.0	-3.2	+26.4	+5.3	

[1] Historic population counts are from decennial censuses and are for April 1st of each decennial year; projected numbers are for July 1 of future decennial years.

[2] Change calculations: (A) Rate, T2 (later year) - Rate, T1 (earlier, base year); (B) (% in category T2 - % in category T1)/ (% in category T1) x 100. Where T2 = later year, T1 = earlier (base) year and interpretation is % increase (or decrease) since the base year; (C) same as (B), using numbers per category in calculations.

SOURCE: Census Bureau with 1980 data from U.S. Chapter B, 1980, General Population Characteristics, Table 45 and population projections from Current Population Reports, Series P-25, No. 1018, Projections of the Population of the U.S. by Age, Sex, and Race: 1986 to 2080, Table 4, middle series 14 projections. Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

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Table F2. Age-Specific Estimates of the Population Pool Eligible for Postsecondary Education, Based on Projections of High School Graduates, 1990, 2000 and 2010 (n's in thousands).

Age-Cohort	Observed[1] 1980: n, HS grads / n, pop. : H.S. Grad. Rate	Projected[2] 1990: (n, pop.) x (grad. rate) : n, H.S. Grads	2000: (n, pop.) x (grad. rate) : n, H.S. Grads	2010: (n, pop.) x (grad. rate) : n, H.S. Grads
80 Yrs.+				(11,410) (.5033) : 5,743
70-79	(combined)		(25,391) (.5033) : 12,779	(15,789) (.7169) : 11,319
60-69		(42,301) (.5033) : 21,290	(20,190) (.7169) : 14,474	(28,334) (.8168) : 23,143
50-59	29,663 / 58,942 : .5033	(22,163) (.7169) : 15,889	(30,797) (.8168) : 25,155	(40,984) (.8339) : 34,177
40-49	16,289 / 22,723 : .7169	(31,624) (.8168) : 25,830	(41,976) (.8339) : 35,004	(40,643) (.8339) : 33,892
30-39	25,848 / 31,634 : .8168	(42,634) (.8339) : 35,552	(41,233) (.8339) : 34,384	(36,383) (.8339) : 30,273
20-29[3]	33,732 / 40,449 : .8339	(40,200) (.8339) : 33,523	(35,336) (.8339) : 29,467	(38,763) (.8339) : 32,324
(20 Yrs.	5,466 / 72,984 : .0749	(71,488) (.0749) : 5,354	(73,344) (.0749) : 5,493	(70,348) (.0749) : 5,269
Overall H.S. Grad. Rates:[4]	110,991 / 226,732 : .4895	137,438 / 250,410 : .5489	156,756 / 268,266 : .5843	176,140 / 282,575 : .6233

[1] Source of 1980 observed high school graduation and age-specific population numbers: 1980 Census, Census Bureau 1% Public Use Microdata Sample (PUMs). High school graduation rates calculated from unrounded numbers.

[2] Source of projected age-specific population numbers: Census Bureau, Current Population Reports, Series P-25, No. 1018, Table 4, middle series 14 projections for July 1 of each year (1988 = base year). High school graduation rates from 1980 (base year), with rates carried forward as each 10-year cohort ages. Census Bureau population projections take into account differential fertility, mortality and net immigration levels by age, race and sex.

[3] The 20-29 age-cohort is the youngest cohort for which high school completion can be expected, so its 1980 rate (rather than that of the youth cohort ages 0-19) is used in progressive projections.

[4] Overall graduation rates are for the total U.S. population, regardless of age, for each decennial year and are based on the sum of numbers of high school graduates projected for each age-cohort for a given year divided by projected U.S. population size. Although no change in age-specific graduation rates are assumed during the period, with birth-cohorts carrying a constant graduation rate over the 30 years the overall U.S. graduation rate climbs considerably from 1980 to 2010 due to high schooling levels of baby boom cohorts and population attrition of older people with less schooling.

Table prepared by S. Knop for Western Interstate Commission on Higher Education and the College Board.

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